THE DRUG AND COSMETIC INDUSTRY

VOL. XXXIV, No. 6 Established 1914 JUNE, 1934

THOMAS R. FARRELL, Editor
ELMER F. SHEETS, Managing Editor
FRAZER V. SINCLAIR, Business Manager
FRANCIS CHILSON, Technical Editor
HARRY G. KELBLY, Circulation Manager

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Front Cover

On our front cover this month we present just a few of those who were present at the meeting of the Associated manufacturers of Toilet Articles this month. Eight pages of pictures are given in another part of this issue.

THE DRUG AND COSMETIC INDUSTRY is published monthly by Drug Markets, Inc., Frazer V. Sinclair, *President and Treasurer;* Thomas R. Farrell, *Vice-president and Secretary.* Publication Address, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 101 West 31st St., New York, N. Y.

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Printed by Sun Printing Co., Pittsfield, Mass.

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The firms listed below are reliable sources of supply which we are glad to recommend to our readers.

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Th. Goldschmidt Corp.
Innis, Speiden & Co., Inc.
M. W. Parsons, Imports
Pfaltz & Bauer, Inc.

Alcohol
American Commercial Alcohol Corp.
Empire Distilling Corp.
A. K. Hamilton
Rossville Commercial Alcohol Corp.
U. S. Industrial Alcohol Co.

Alkaloids
Abbott Laboratories
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Aromatic Chemicals, Essential Oils, Flavors
Budd Aromatic Chemical Co., Inc.
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co. Inc.
Compagnie Duval
Evergreen Chemical Co., Inc.
Benj. French, Inc.
Fritzsche Brothers, Inc.
General Drug Co.
Givaudan-Delawanna, Inc.
George Lueders & Co.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
Edwin Seebach Co
Geo. Silver Import Co.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.
Van Dyk & Co.
Albert Verley, Inc.

Bath Crystals
Solvay Sales Corp.

Beeswax
W. H. Bowdlear Co.
Koster-Keunen
Theodor Leonhard Wax Co., Inc.
Smith & Nichols, Inc.
Will & Baumer Candle Co.

Botanical Drugs
W. Benkert & Co., Inc.
J. L. Hopkins & Co.
Peek & Velsor, Inc.
S. B. Penick & Co.

Chalk
Industrial Chemical Sales Co., Inc.
John & E. Sturge, Ltd.

Citric Acid
H. J. Baker & Bro.
J. T. Baker Chemical Co.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
Mallinckrodt Chemical Works
McKesson & Robbins, Inc.
Merck & Co., Inc.
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.

Cod Liver Oil
W. Benkert & Co., Inc.
Consumers Import Co.
P. R. Dreyer, Inc.
McKesson & Robbins, Inc.
S. B. Penick & Co.

Colors
Ansbacher-Siegle Corp.
Fezandie & Sperrle, Inc.
Interstate Color Co., Inc.
H. Kohnstamm & Co., Inc.
Leeben Chemical Co., Inc.
R. F. Revson Co.

Gums
Paul A. Dunkel & Co., Inc.
Frank-Vliet Co., Inc.
J. L. Hopkins & Co.
Innis, Speiden & Co.
S. B. Penick & Co.
Thurston & Braidich
Jacques Wolf & Co.

Lanolin
American Lanolin Corp.
Th. Goldschmidt Corp.
Innis, Speiden & Co.
N. I. Malmstrom & Co.
Pfaltz & Bauer, Inc.

Lipsticks, Rouges, Etc.
American Advertised Products, Inc.

Magnesia
Schofield-Donald Co., Inc.

Medicinal Chemicals
Abbott Laboratories
J. T. Baker Chemical Co.
Benzol Products Co.
California Fruit Growers Exchange
Dow Chemical Co.
R. W. Greeff & Co., Inc.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Co.
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.

Mineral Oil
M. W. Parsons, Imports
S. Schwabacher & Co.
L. Sonneborn Sons, Inc.
Stanco Distributors, Inc.

Neutral White Soap
J. L. Hopkins & Co.
S. B. Penick & Co.
John Powell & Co.

Rubber Latex
Heveatex Corporation

Stearates
Franks Chemical Products Co.
Mallinckrodt Chemical Works
M. W. Parsons, Imports
R. F. Revson Co.

Talc
Innis, Speiden & Co.
Chas. Mathieu, Inc.
R. F. Revson Co.

Zinc Oxide
Innis, Speiden & Co
New Jersey Zinc Co.
R. F. Revson Co.

Containers & Machinery

Applicators and Droppers
Glass Products Co.
A. C. James & Co.
Penn. Glass Products Co.

Bottles & Jars
Carr-Lowrey Glass Co.
Dura Colors, Inc.
Glass Products Co.
Hagerty Bros. & Co.
Hazel-Atlas Glass Co.
Maryland Glass Corp.
Owens-Illinois Glass Co.
Swindell Brothers, Inc.

Boxes & Cartons
H. R. M. Gordon
Green Brothers, Inc.
Karl Voss Corp.
Lowe Paper Co
Young Bros., Inc.
Douglas Young, Inc.

Caps
Aluminum Seal Co.
Arco Crown Cork & Cap Co.
Armstrong Cork & Insulation Co.
Bridgeport Metal Goods Mfg. Co.
Chase Brass & Copper Co.
General Plastics, Inc.
Ferd. Gutmann & Co.
Phoenix Metal Cap Co.

Collapsible Tubes
National Collapsible Tube Co.
New England Collapsible Tube Co.
White Metal Mfg. Co.

Corks
Arco Crown Cork & Cap Co.
Armstrong Cork & Insulation Co.

Cosmetic Cases
Bridgeport Metal Goods Mfg. Co.
Chase Brass & Copper Co.

Filter Paper
August Giese & Son

Glassine Paper
Riegel Paper Corp.

Labels
John Horn

Machinery (Packaging)
John W. Ayers & Son (Pill & Tablet)
Arthur Colton Co. (Tube & Tablet)
Karl Kiefer Machine Co. (Bottle)
Geo. G. Rodgers Co. (Tube)
F. J. Stokes Machine Co. (Tube & Tablet)
Stokes & Smith Co. (Powder)
U. S. Bottlers Machinery Co. (Bottle)

Machinery (Production)
Abbe Engineering Corp.
Alsop Engineering Corp.
Ertel Engineering Corp.
Manton-Gaulin Mfg. Co.
New England Tank & Tower Co.
Pfaudler Company
George G. Rodgers Co.
Chas. Ross & Son Co.
F. J. Stokes Machine Co.

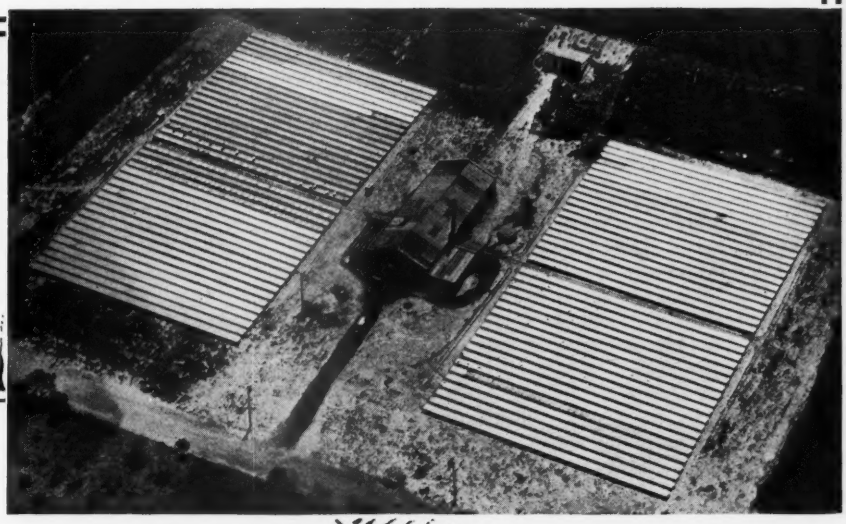
Plastic Materials
General Plastics, Inc.

Tanks, Kettles
Alsop Engineering Corp
Ertel Engineering Corp.
Pfaudler Company

Vials
Kimble Glass Co.

KOSTER KEUNEN

Beeswax guaranteed 100% sunbleached without any chemicals. Visit our bleacheries and convince yourself.



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At Sayville, Long Island, where sunlight conditions are ideal, we are now refining the same fine quality beeswax which the home plant at Aalst, Holland, has made famous for 80 years.

Critically selected crude, ideal conditions for bleaching, more than forty years direct experience in sunbleaching beeswax by the resident American director produce a superfine beeswax ideally suited for cosmetics.

May we send samples and quote prices in any quantity?

KOSTER KEUNEN

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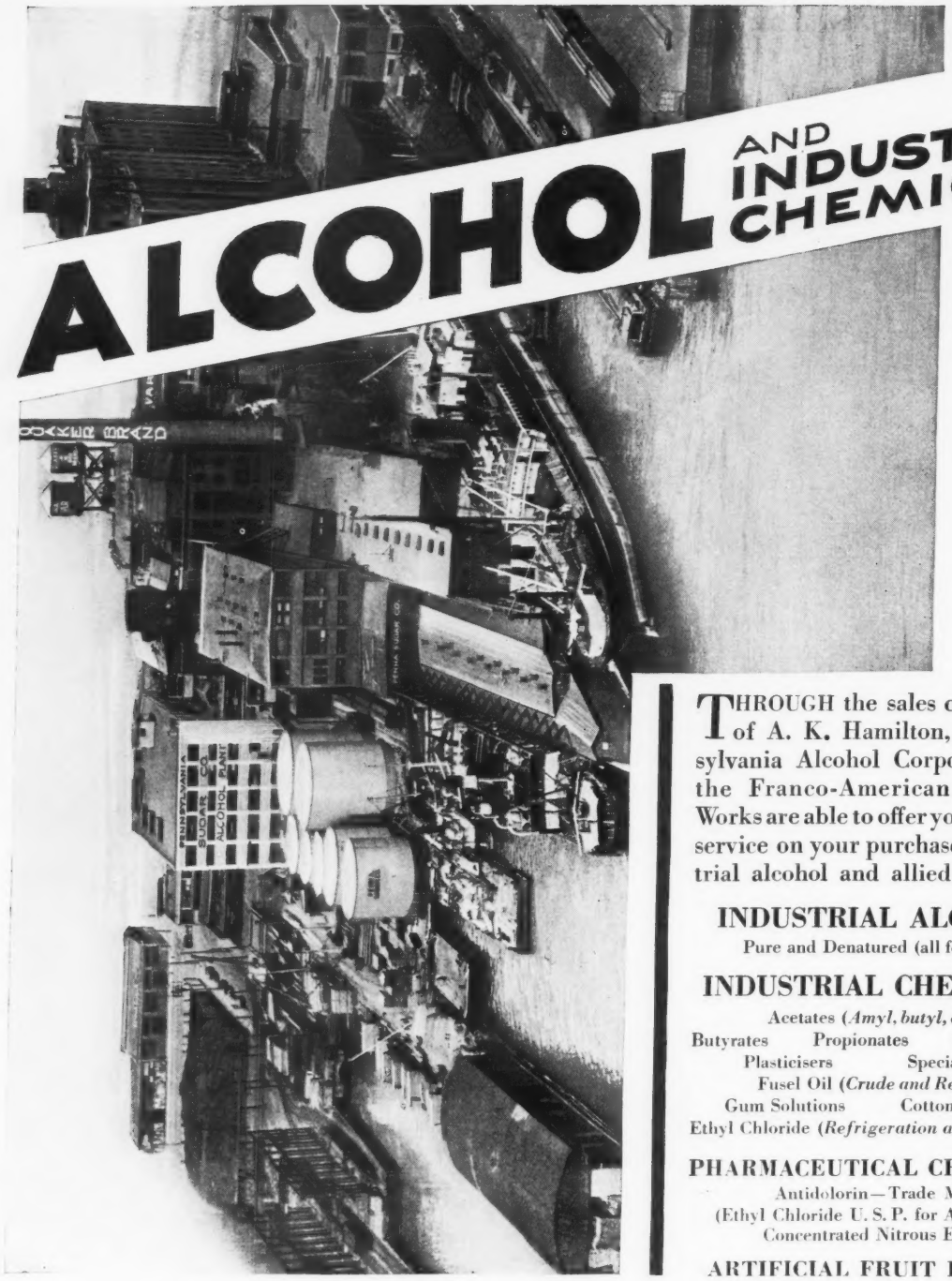

THROUGH the sales organization of A. K. Hamilton, The Pennsylvania Alcohol Corporation and the Franco-American Chemical Works are able to offer you a two-fold service on your purchases of industrial alcohol and allied chemicals.

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Pure and Denatured (all formulae)

INDUSTRIAL CHEMICALS
Acetates (*Amyl, butyl, ethyl*)
Butyrates Propionates Leather Dopes
Plasticisers Special Esters
Fusel Oil (*Crude and Refined*)
Gum Solutions Cotton Solutions
Ethyl Chloride (*Refrigeration and Ethylation*)

PHARMACEUTICAL CHEMICALS
Antidolorin—Trade Mark
(Ethyl Chloride U. S. P. for Anaesthesia, Concentrated Nitrous Ether)

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Sales representatives and warehouse stocks in principal cities

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No more "castor oil smell" in SOAPLESS SHAMPOOS

Here's an inexpensive way to rid your product of "castor oil smell."

It's a new Givaudan re-odorant, and it's called SULPHOL NO. 1. It completely kills the repugnant odor of castor oil, and leaves a delightful, mild, flower-like fragrance . . . without lessening the effectiveness of your shampoo in any way.

And best of all, SULPHOL NO. 1 costs almost nothing to use. Because a very small quantity does the job *thoroughly*. Add as little as 1% to your present formula and the castor oil odor is gone!

SULPHOL NO. 1 was developed in the Givaudan laboratories. We'll gladly send you a generous size sample, without obligating you in any way. Write today for full information on this important development.

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UNIQUE "DOUBLE-LOCKING"

Alseco seals

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All the profits from sales under your brand go into *your* pocket, if your bottles or jars are protected with Alseco seal "locks." These seals can only be made and applied in *your* plant, on patented machines which we alone can furnish.

Only this patented method assures *an easily removable top, yet capable of holding a vacuum!*

Alseco seals come in sizes and types for every purpose. They can be beautifully embossed and lithographed. Made of Aluminum, they can't smudge or contaminate. They offer many profit advantages to you. We can't cover them all here. Won't you write?

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Alseco **SEALS AND SEALING MACHINES**

LINALYL ANTHRANILATE

This series of Anthranilate Esters developed by the house of Albert Verley, Inc.—principally **Linalyl Anthranilate,** Linalyl Anthranilate of Methyl, Terpenyl Anthranilate, and **Phenylethyl Anthranilate**—is rapidly gaining in favor in the hands of progressive perfumers. ★ Linalyl Anthranilate is especially appreciated for its value in building synthetic Neroli, Orange Blossom, and Jasmin types—as well as in a multitude of other compositions where this pleasing note is desired.

new ANTHRANILATE esters

★ LONG USED EXTENSIVELY IN

Albert Verley **PERFUME COMPOSITIONS**

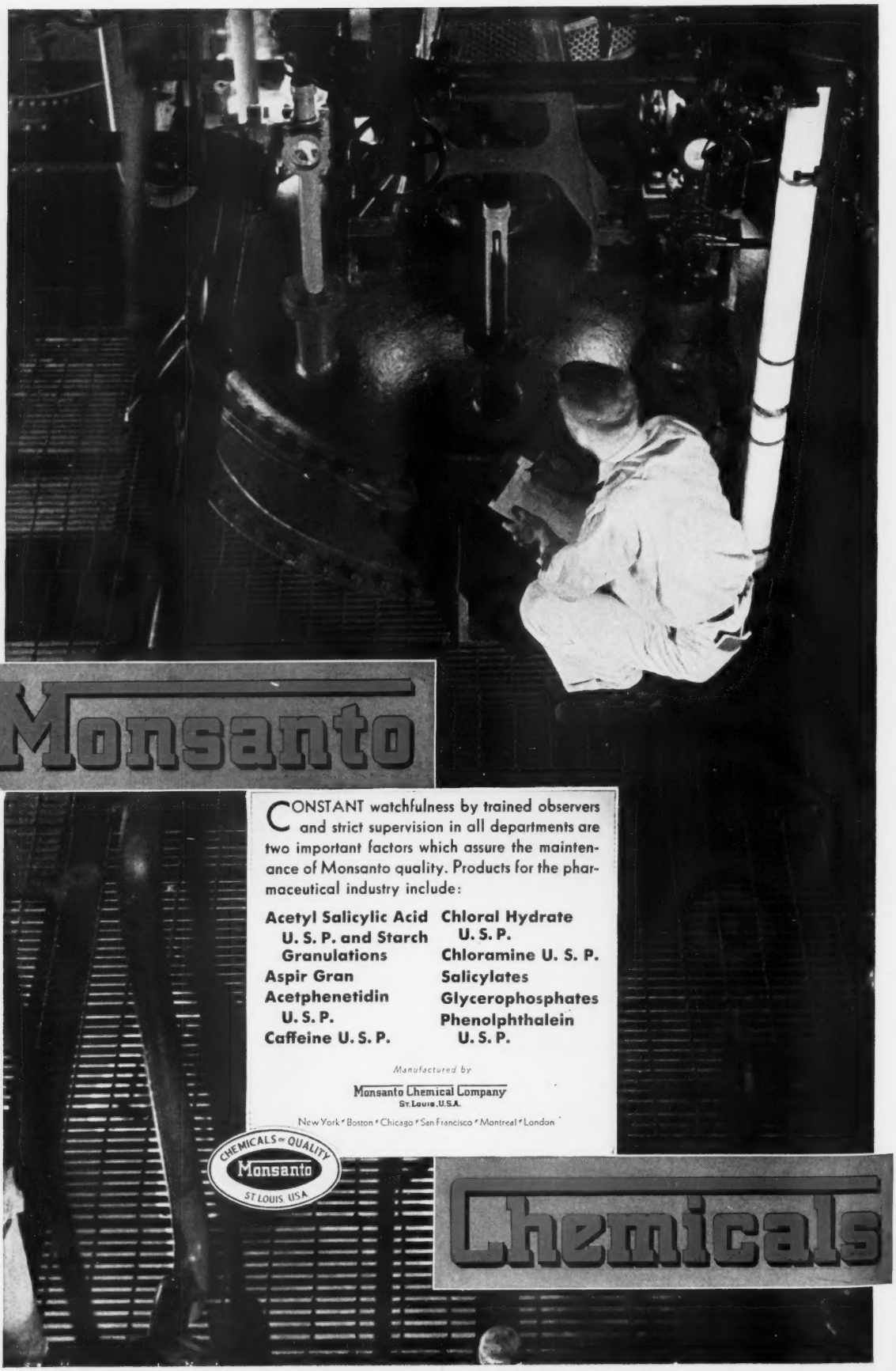
. . . now, only a year after their release as straight aromatic chemicals, these Anthranilates are playing an important part in the program of Albert Verley, Inc., to provide perfumers with new synthetics for the creation of new, modern compositions. ★ Before the extreme technical difficulties of production were overcome by the staff of Albert Verley, Inc., one had to be content with a degree of purity greatly inferior to that now attained. Today the fruit of their labors is yours for the asking . . . Write for samples and quotations.

ALBERT VERLEY, INC.

D. A. BENNETT, President, 11 East Austin Ave., Chicago; L. J. Zollinger, Vice President, 114 East 25th St., New York. Exclusive American representatives for ETABLISSEMENTS ALBERT VERLEY, 8, [illegible] de la Marine, Isle St. Denis, (Seine), Paris, and S. A. TOMBAREL FRERES, [illegible] France. Pacific Coast Distributors: Mefford Chemical Company, 1026 Santa [illegible] Ave., Los Angeles, Calif.

PHENYLETHYL ANTHRANILATE

This beautiful ester is produced by Albert Verley, Inc., in a remarkably high degree of purity, as a perfectly white crystalline solid. ★ Where a sweet winey fragrance, bordering on that of fresh grapes, is sought for by the perfumer, this Anthranilate is of great value — entirely replacing ordinary Methyl Anthranilate in many instances. It blends beautifully with the Orris and Methyl Ionone notes so desirable in many compositions. ★ Invaluable in the reproduction of the Gardenia Blossom, Phenylethyl Anthranilate has an extraordinary fragrance — even alone, it resembles to a remarkable degree the characteristic perfume of the fragrant American Iris.



Monsanto

CONSTANT watchfulness by trained observers and strict supervision in all departments are two important factors which assure the maintenance of Monsanto quality. Products for the pharmaceutical industry include:

Acetyl Salicylic Acid U. S. P. and Starch Granulations
Aspir Gran
Acetphenetidin U. S. P.
Caffeine U. S. P.
Chloral Hydrate U. S. P.
Chloramine U. S. P.
Salicylates
Glycerophosphates
Phenolphthalein U. S. P.

Manufactured by

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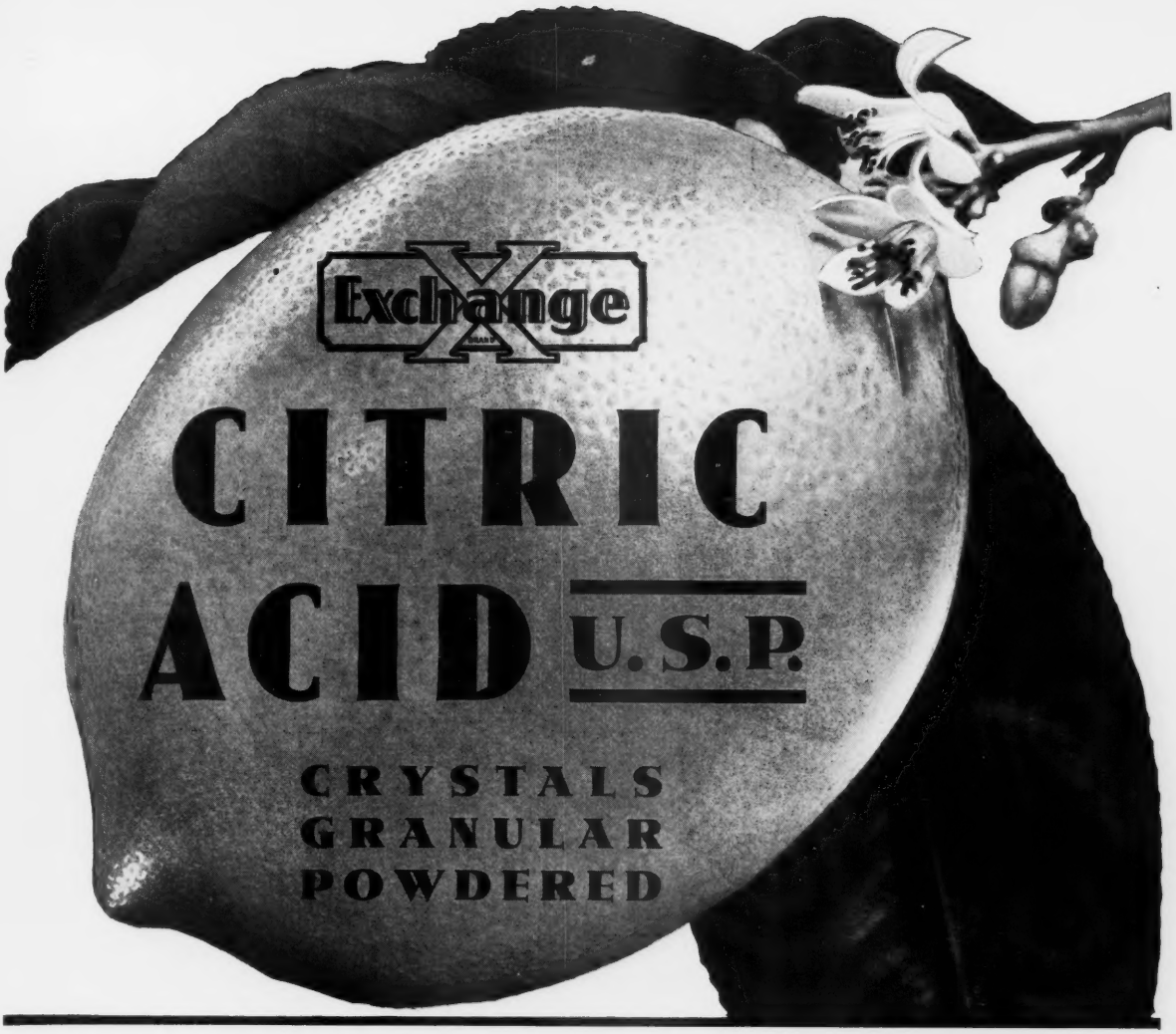
CHEMICALS OF QUALITY
Monsanto
ST. LOUIS, U.S.A.

Chemicals



MADE FROM AMERICAN LEMONS

by the Exchange Lemon Products Company of Corona, California. Backed by the Sunkist group of 13,200 citrus growers—largest in the world.

Immediate shipments from warehouse stocks in New York, Chicago and Philadelphia. For prices on kegs, barrels or carloads, consult any of the following distributors:

NRA MEMBER U.S. WE DO OUR PART

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Mallinckrodt CHEMICAL WORKS, St. Louis, Philadelphia, New York, Chicago.
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NEW YORK QUININE & CHEMICAL WORKS, 101 North 11th Street, Brooklyn, New York.
SWANN CHEMICAL COMPANY, Birmingham, Alabama.
THE HARSHAW CHEMICAL COMPANY, Cleveland, Ohio.
CALVERT ANILINE & CHEMICAL CO., 225 Walnut Street, Cincinnati, Ohio.
THOMPSON-HAYWARD CHEMICAL CO., 29th & Southwest Boulevards, Kansas City, Missouri.

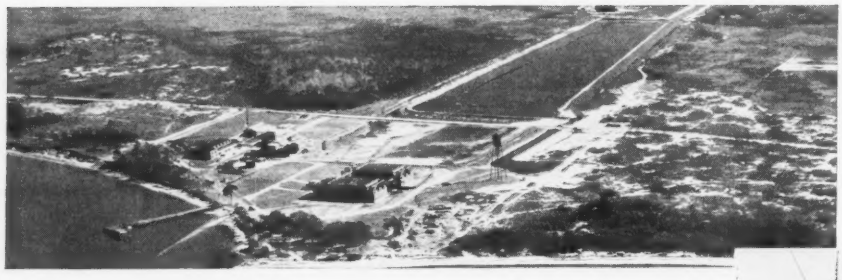
PACIFIC COAST SERVED BY

Products Department—CALIFORNIA FRUIT GROWERS EXCHANGE, Ontario, California

..So your Car can give its Best Performance

ETHYL-DOW CHEMICAL COMPANY

BRINGS THE ATLANTIC TO ALMOST EVERY GASOLINE USER



The seawater plant of the Ethyl-Dow Chemical Company, which extracts valuable elements from the ocean.

Great canals bring in millions of gallons of ocean water from which bromine is extracted.

DOW ENGINEERS PERFECT NEW PROCESS TO EXTRACT BROMINE *from the* OCEAN

The sea, greatest storehouse of wealth on earth, holds in solution in varying quantities nearly all the valuable elements known. The achievement of Dow engineers in designing processes by which one of these elements may be secured profitably is without doubt the outstanding story of chemical progress at the present time.

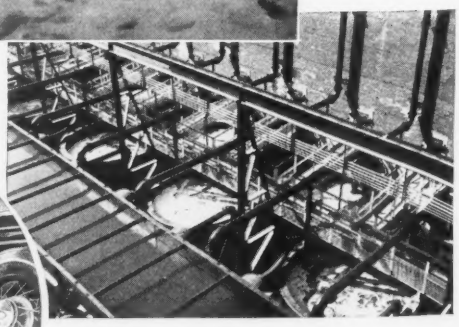
Bromine, an important ingredient of Ethyl fluid, is here secured in sufficient quantities to provide anti-knock for millions of gallons of gasoline per day. By this achievement, Dow engineers actually bring the Atlantic Ocean to almost every gasoline user.

Although bromine is the only product now extracted at this seawater plant, it is not beyond probability that many other products may be recovered. The plant at Midland, Michigan, started with the manufacture of bromine from brine obtained from a single salt well and now produces more than 250 chemical products. Whether the ocean will be made to give up its gold is a problem that intrigues the imagination. Other elements present in greater volume offer boundless possibilities. Now that the way has been found, further progress seems inevitable.

Dow research, however, applies itself with equal intensity to the improvement of the products and processes of its customers wherever Dow Chemicals are used. Send us your list. Let us quote on your requirements.

Huge pumps bring in 26,000 gallons per minute.

This flume conducts raw material to absorption tanks.

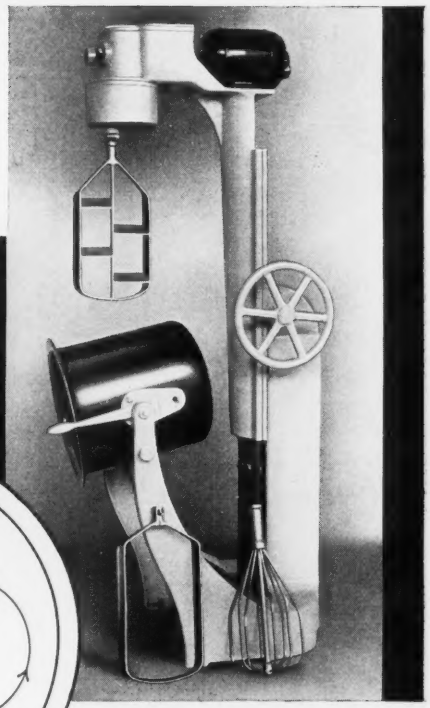


Material from the Atlantic is a part of the Ethyl gas you buy for best performance.

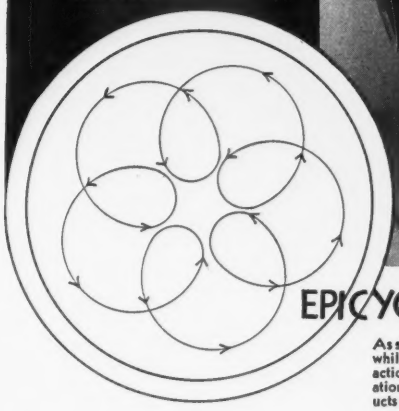
THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

TO MIXING EQUIPMENT USERS

THE "MULTIMIXER" gives you greater mixing utility plus protection against discoloration . . . . .



At right—The Pfaudler "Multimixer". Available with 10 and 20 gallon glass lined steel mixing kettles. Single shell or jacketed in construction.



EPICYCLIC AGITATION

As shown in the diagram, the agitator describes a circle while revolving itself. Consequently, a thorough mixing action is assured which at the same time reduces incorporation of air to a minimum, highly desirable for such products as shaving creams, lotions, etc.

Glass fused into Steel by the exclusive Pfaudler Process

FIFTY YEARS

1884....1934

In 1884 Pfaudler invented glass-lined steel equipment and today is the world's largest manufacturer of this internationally used product. Its constantly increasing applications are all based on specific advantages—sanitation, prevention of contamination, resistance to acids, dependable low cost service. Because of this the dairy, ice cream, food, brewing, beverage, distilling and chemical process industries use it on a large scale. We can serve you likewise.

Pfaudler

PRACTICAL experience has proved that the Pfaudler "Multimixer" accomplishes a thorough emulsification of shaving cream, face creams, lotions, ointments and other products of similar viscosity with a minimum incorporation of air. And the beauty of it is, that it eliminates complicated drives at a correspondingly lower cost.

The "Multimixer's" sturdy ruggedness assures years of heavy duty service. Different standard agitators coupled with a variable speed drive, increases its flexibility as to use. The agitator lifting mechanism and tilting device for the mixing kettle makes it easy to discharge the product quickly.

In the acid resistance of the glass lined steel mixing kettle (single-shell or jacketed) your product is definitely protected against discoloration, the equipment against excessive corrosion. If you have a mixing problem, you ought to investigate the "Multimixer". If that doesn't answer your problem, our long experience in building efficient types of glass lined steel mixing equipment is at your service. Let us send you our latest bulletins.

THE PFAUDLER CO., 1509 GAS & ELECTRIC BLDG. ROCHESTER, N.Y.
Branch Offices: New York City, Chicago, Philadelphia, San Francisco (Pfaudler Sales Co.)

PFAUDLER *glass-lined steel* EQUIPMENT

MULTIMIXERS • STORAGE TANKS • DISTILLATION EQUIPMENT • EVAPORATING PANS • REACTION KETTLES • DOUBLE MOTION MIXERS

MERCK

CITRIC ACID

IMPARTS NATURE'S OWN FLAVOR

CITRIC acid is one of Nature's most abundant pure fruit acids, found in such delicious fruits as the orange, lemon, lime, raspberry, pineapple, strawberry, cranberry, red gooseberry, currant, red whortleberry, tamarind and red elderberry.

In 1875 the Cresson Medal for "Perfection of Result" was awarded to the Citric Acid made by Powers & Weightman—the first chemical establishment in America to manufacture this product and the first to guarantee its purity and uniformity.

THE GOLD MEDAL STANDARD

The consolidation of Powers, Weightman, Rosengarten with the Merck organization to form the combined institution of Merck & Co. Inc., ensured the maintenance of those same standards of high quality in the manufacture of Citric Acid under the Merck label.

Merck Citric Acid is an exceptionally fine product. There is only one grade available under the "Gold Medal Standard" and that is the best. Manufacturers who want their products to have Nature's own flavor know that they can depend upon the guaranteed purity of the Merck product.

You can procure Merck Citric Acid in crystals, in granulated, or in powder form. Whatever your needs, we can supply them. For further information and prices address the General Sales Division —

MERCK & CO. Inc. *Manufacturing Chemists* RAHWAY, N. J.

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"A vial is so handy to carry!"

GIVE the consumer a package that is easy to carry — conveniently put in the handbag or vest pocket — and sales begin to climb.

Outstanding pharmaceutical, food, toiletry and proprietary firms have found out that Kimble Vials increase the eye-appeal and sales-appeal of their products many fold; that Kimble Vials make the lightest, easiest-to-carry glass package available. They reduce postage and shipping costs many times over moulded bottles of equal capacity.

Kimble Vials — available in a wide variety of standard and special types, sizes, and styles and colors of closures — are invariably given dominating space on the dealer's shelves. They can be so attractively labelled — are so crystal clear and show off their contents so forcibly — that the customer is won over promptly.

Be modern — follow the leaders in today's sampling and packaging campaigns — by standardizing on Kimble Glass Vials!

Send us a sample of the product on which you are now planning a sales drive. If it is suitable for sampling or packaging in small containers, we will show you how it looks in the Kimble Vial best fitted for the purpose. We have helped many nationally known firms to sample their products successfully to millions of consumers throughout the country.

KIMBLE GLASS CO.
VINELAND, N. J.
NEW YORK • PHILADELPHIA • BOSTON
CHICAGO • DETROIT

DO DUREZ DISPLAY STANDS INCREASE SALES?

Two years ago, Norwich put out this Durez stand for their Pepto-Bismol. Sales jumped 25% . . .

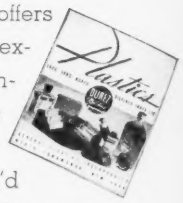
SO

Norwich, pleased, recently developed this Durez stand for their aspirin. Sales have jumped 38% in all territories where the display has been introduced!

JUST ASK Norwich

Durez is an ideal material for product display stands. It will not break, it's light in weight, it will not dog ear, dull, dent, scratch or peel. Practically any shape is possible, with lettering and trade-mark molded in with a single operation. No finishing is necessary and the color is permanent. If you have some product that needs a bit of sales stimulation and you'd welcome one of those big increases that a Durez stand gave Norwich's aspirin, why not write us for more complete information? General Plastics, Inc., 355 Walck Road, North Tonawanda, New York.

☆



General Plastics now offers you a new booklet explaining the advantages of Durez for packaging, counter displays, etc. If you'd like to have one, send us your name and address. It's free, of course.

☆

DUREZ

THE MODERN MOLDING COMPOUND

JARS CLOSURES BOXES

TO THE TUNE OF

"The Man on the Flying Trapeze"

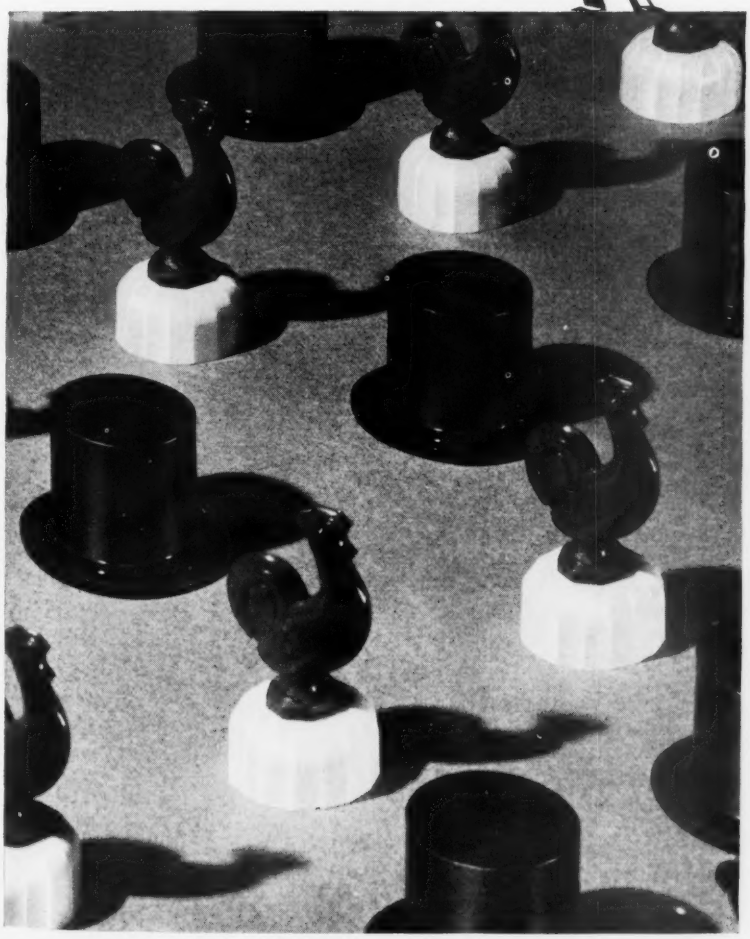
These caps will come off with the

g-r-e-a-t-e-s-t of ease,

And that's only one of their fine qual-i-ties!

They seal good and tight, and they will not corrode!

They are handy and right in the mode!



THE Artmold Caps on the left were specially molded for American Spirits, Incorporated, New York. Park Avenue Gin will wear the high hat, and the scarlet chanticleer mounted on a white cap will crow over liqueurs.

Our point in showing them here is to convince you that you should place your tough jobs of cap molding with Armstrong. These intricate designs show skill of the highest order. And it follows that simple jobs, too, could be placed in no better hands.

All Armstrong's Artmold Caps, whether of standard or special design, can be *removed and replaced with the greatest of ease*. They seal tightly, won't stick or corrode.

We will cheerfully furnish any information you'd like to have about Armstrong's Artmold Caps. Write for our booklet "A Tempting Package Is Half Sold." Or, better yet, ask one of our closure specialists to call and discuss, without obligation to you, our solutions for your sealing problems. Armstrong Cork & Insulation Company, Closure Division, 913 Arch St., Lancaster, Pennsylvania.

Armstrong's
ARTMOLD CAPS

PHENOBARBITAL

...like snow on the hills

MALLINCKRODT Phenobarbital is as pure a phenylethylbarbituric acid as is manufactured today. Tests prove that it exceeds the purity requirements of the U.S.P.

Mallinckrodt Phenobarbital is pure white. It is marketed in two forms: a fine powder, and as small lustrous crystals, both of which dissolve in ether or alcohol to give a clear solution without residue.

Phenobarbital Sodium N.N.R. manufactured by the Mallinckrodt Chemical Works dissolves in alcohol or water without residue, which indicates the absence of harmful impurities.

Send for a sample and try this simple test—dissolve a few grains of Phenobarbital or Phenobarbital Sodium in a small quantity of alcohol. Then note the sparkling appearance of the solution.

Mallinckrodt Phenobarbital and Phenobarbital Sodium sent to pharmaceutical and hospital users mean reorders.

OTHER MALLINCKRODT HYPNOTICS AND SEDATIVES:

Ammonium Bromide	Chloral Hydrate	Paraldehyde	Sodium Bromide	Sulphon-Methane
Calcium Bromide	Lithium Bromide	Potassium Bromide	Strontium Bromide	Sulphon-Ethyl-Methane

CHEMICAL Mallinckrodt WORKS

MAKERS OF OVER 1500 FINE CHEMICALS

ST. LOUIS • CHICAGO • PHILADELPHIA • NEW YORK • TORONTO • MONTREAL

An Advancing Industry

SLOWLY, perhaps, in the eyes of some observers, but nevertheless surely, the business of manufacturing drugs and cosmetics is advancing with the times. We believe that the latest step taken by the Proprietary Association by means of which it will censor the advertising of its members will appear to the casual observer as the most striking indication of this progress. But within the past year indications of the state of mind of the large majority of manufacturers in this industry have been manifold, and it has become easier for those who favor higher standards to speak out and make themselves heard.

THE action of manufacturers of drugs and cosmetics toward a revision of the Federal Food and Drugs Act was perhaps the first outward sign. Drug manufacturers favored revision of the act toward the end that quality be improved, that deception and fraud be completely eliminated, and that advertising be honest. Although unreasoning enforcement officials of the Food and Drug Administration would dispute the honest intent of the manufacturers, due to the manufacturers' strenuous objection to the drastic Tugwell Bill, it is nevertheless true and the record is clear proof that it is true. As a second indication of this feeling on the part of drug manufacturers, there is the clause written by the industry itself into the package medicine code declaring false advertising to be a violation of the code. Cosmetic manufacturers were not only willing to accept federal control of their industry, but in most instances actually welcomed the control as a means of improving their own status as the status of honest drug manufacturers was improved by the present Food and Drugs Act.

THE business of manufacturing drugs and cosmetics is an enterprise which can be successful only through the production of meritorious products. And the best proof that the leading drug houses produce meritorious products is the fact these houses have been the leaders in the industry for a long term of years, and still show no signs of being displaced.

Who is to Blame?

Unless and until manufacturers in this industry can be assured that private brand merchandise will not be actively pushed by the retailer, maintained price policies can not succeed. And elimination of this practice is directly up to the retail trade itself, since continuation of a price maintenance state of affairs is particularly in the interest of the retailers.

Retail interests have thrown back upon the manufacturers the blame for this practice, stating that many of the larger houses are actually supplying the retailers with the substitute goods. The manufacturers can not deny this, but in answer they merely ask the question of whether or not they are to be expected to suffer losses on the business of their own specialties through this practice, and not try to maintain their volumes of sales by obtaining business in the manner in which the retailers indicate they prefer business to be done. Retailers must realize that if the more reputable houses do not supply these goods, newer houses will spring up and take a large part of the volume which these more reputable houses have had over a long period.

Manufacturers are just as unable to control the practices of one another in this respect as are the retailers. If and when retailers will stop buying these substitute goods, manufacturers will stop making them. No matter how the question is argued, the fact always remains that the power to improve the power of the retailers is in their hands and in nobody's else. Some day they take proper advantage of this fact.

• • •

Raw Materials

The sharp advances in the prices of Central European botanicals as the result of the world-wide drought is an example of what might be expected by manufacturers who have been experiencing low prices for so long that they had begun to believe that they were normal. A comparison of the prices of a few months ago with those prevailing several years back would clearly indicate to any manufacturer that he should have kept himself well stocked with those commodities subject to the whims of nature. It is hardly wise to buy heavily in a rising market, but if the drought marks the definite end of the depression and a steadily rising market will prevail for many years to come, buying now would be wiser than waiting.

Manufacturing consumers can always afford to go long on the raw materials for which they have a definite use. They can not actually lose money on their purchases, the only thing that they can do is to regret that they did not make still more money by buying at a different time. But picking the very bottom of a market is fine art that nobody has as yet mastered, and it is far better to take some of the profit than to lose it all.

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Hormones

Everyone connected with drug manufacturing is watching carefully the development of hormone therapy. It is the opinion of practically all manufacturers engaged in extensive research that the greatest therapeutic developments of the next five or ten years will occur in the field of endocrinology and vitamins. For this reason these manufacturers are turning over a major part of their research facilities to the study of these two fields.

Hormones and vitamins are both fields fraught with much danger as well as with much good. The use of thyroid extract by a layman to cure obesity is well known to be a dangerous procedure. If the results of research prove that hormone therapy must be administered under the care of a physician, it will mean that in the future, a much larger percentage of the medicines sold will be sold for the filling of prescriptions or for dispensing by physicians. Unless there are discovered hormones which are relatively safe for the layman to handle, this new branch of therapeutics will be closed to the package medicine industry just as the market for digitalis, ergot, antitoxins, and many other preparations is closed to that industry today.

But if the use of hormones and vitamins increases the number of diseases which can effectively be treated with medicinal agents, the entire drug manufacturing industry will benefit. It is quite easy to visualize the eventual replacing of surgery by the use of medicines still undiscovered.

• • •

Exclusiveness

Exclusiveness as applied to the merchandising of a cosmetic line is a two-edged sword. For while an attitude of exclusiveness thrown around a line makes it more desirable to those who know the line, this attitude prevents the line from ever becoming really well known and widely used. Further, the maintenance of an air of exclusiveness by means of high prices and few distributors, not only tends to restrict the more general use of cosmetics, but also invites competition from those who have no compunction about lowering the price level of the entire market.

During the depression cosmetic manufacturers have had a real taste of just how far a market can go under such conditions. We have very little doubt that during the past three years leading cosmetic manufacturers suffered from the sale of goods manufactured for syndicate stores to a greater extent than drug manufacturers suffered from private brands. Many drug manufacturers have now seriously adopted a price maintenance policy and perhaps will suffer to a greater extent, but if they do suffer they know what to do—lower the prices to the consumer by one means or another.

We know of no drug house which maintains a high price merely for the purpose of being exclusive and thus protecting its business. Yet

drug manufacturers are well able to build up enviable reputations, make money, and largely eliminate undesirable competition. We often wonder whether or not the difference between the merchandising of cosmetics and the merchandising of drugs could easily be dispelled.

• • •

Which Code?

Drug and cosmetic manufacturers as a general thing must work under several codes of the NRA. This is due to the fact that often they manufacture products which fall into different classifications as the industries have been limited by the government officials. Thus a manufacturer who produces cod liver oil tablets for sale to the public must file his prices for this product with the Package Medicine Code Authority and abide by the fair trade practices of this code in the sale of that product. But if this same manufacturer makes ethical preparations which are sold in bulk to the druggist for dispensing on prescriptions, he must file the prices for these items with the Manufacturing Pharmaceutical and Biological Industry Code Authority and observe a different set of fair trade practices in the sale of these products. Likewise his cosmetics must be handled in accordance with the Cosmetic Code Authority, his shaving and toilet soaps in accordance with the Soap Code, and so on.

Such a condition is bound to result in some confusion for a time in the case of those manufacturers whose lines extend from hypnotics, through popular drug specialties to cold creams and toilet lanolins. But in the case of houses whose volume in each classification is relatively large, the departmentalized condition already in existence in the organizations of these manufacturers should tend to eliminate much of the chance for violation of the fair trade practices of one or another of the codes.

No small amount of trouble can be avoided by manufacturers if they will take the trouble to study the various codes to which they are subject, and fix in their minds just what products fall under each of the various codes.

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More Advertising?

The question of just what changes are to be forced upon the manufacturers if the price maintenance state of affairs is continued over a long period is still being debated. Many are of the opinion that more money must be spent in one way or another to force nationally advertised goods through the channels of distribution as a result of the increased attractiveness of the purchase of private brand goods. This means that a must heavier burden must be placed upon advertising and that manufacturers will undoubtedly be forced to increase their advertising expenditures.

The alternative to increased merchandising expenditures appears to be a reduction in prices all along the line so that the retailer can sell nationally advertised goods at prices which are closer to the prices of the private brand merchandise. Therefore, it would appear that manufacturers have the choice of spending the money on increased advertising or passing it on to the public in the form of lower prices.

• • •

New and Non-Official

Wuz You Dare, Scotty?

This department is limping to press as the result of too many conventions coming too close together. We haven't yet developed the art of playing poker, or dancing, or just fanning the air until five or six in the morning, and then getting up at seven, bright as a boloney dollar, to play a little golf or sell a carload of p-ethyl-paramino-a-benzoate or something. We must be at the wrong age or perhaps that attack of German measles we had, when a mere child, impaired our amateur standing. For plenty of guys and plenty of gals, too, twice our age, seemed to do it and thrive on it—and the same goes for those half our age, or maybe it only seemed like half.

Not that we're complaining, no, a thousand times no, for we had a swell time. Even in our present condition of emerging from the ether, we'd rush to another convention like that one at the drop of a hat—or even if somebody only shook a hat. Why, just to give you an example, on Friday morning we had three breakfasts—one at five o'clock, one at six and one at seven. And each time, with a different party in a different room. Clubby breakfasts seemed to be in vogue with pajamas and dressing gowns as the proper attire. And, in between breakfasts, was ample opportunity to grab a little sleep—oh, ample, we assure you.

There was never a dull moment and those who have forgotten, or can't remember, what happened, will find our collection of "Kandid Kloseups" quite enlightening. (Editor's Note—These are for private showings only.) Perhaps Barney's recovery of the siphon bottle was the big dramatic moment of the convention, but there were many things that seemed funny at the time and one discussion that still seems funny. It happened on the first night, which is probably the reason we remember it so well. It goes something like this:

Dr. George Laing of the Philadelphia Laings, American branch of the Edinborough Laings, had embarked upon his annual lecture on genealogy. Dr. Laing traced his ancient line back twenty thousand years to the time when, according to him, the Gogartys—the Brooklyn Gogartys, American branch of the Tipperary Gogartys—were still hanging from the branches of the trees by their tails—or maybe it was from ropes. Dr. Laing was a bit hazy on this point. According to him it could have been either and was probably both. Mr. Gogarty came to the defense of his ancestors by pointing out that Moses last name was Gogarty and that Moses was forced to write the ten commandments in order to civilize the Laings. He also pointed out that when Moses led the exodus from Egypt—or maybe it was from Edinborough—if there was a Laing in the company he didn't amount to anything. He was just "alang."

But the surprise of the evening came when it was revealed that the roots of the McInnes' family tree were stuck into the same oatmeal that nurtured the Laing family tree. That really started Dr. Laing. You couldn't stop him. It seems that Jim (Smoke Eater Jim) was born in Paisley, Scotland. He was actually born on a Paisley shawl. But Dr. Laing was unable to discover which side of the shawl Jim was born on. Apparently in Scotland it makes a difference. Dr. Laing then contended that all great men have a little Scotch in them. The audience agreed unanimously and added a bit more—just to make sure.

HUNTING THE

A curious allergy. A gentle slap on the back causes this person's skin tissues to swell into an almost perfect reproduction of the hand that did the slapping.

A year-old nursing baby suffers from asthmatic attacks whenever the mother is menstruating; a man develops large hives from eating strawberries grown in one region but has no reaction to berries from another part of the country; a ten-year old boy has asthmatic attacks from eating "hot dogs"; the five-year old daughter of a millionaire suffers from a running-nose and the house and furniture are torn apart to discover that the material to which she is sensitive is in the adhesive used in papering the walls; a nursing baby develops colic every time the mother eats eggs; a farmer's wife has asthma as a result of handling eggs laid by her own hens while other eggs do not bother her; a boy has sick headaches from eating salted peanuts but neither the peanuts nor the salt taken singly affect him; a man is so sensitive to cold that contact with a piece of ice raises big welts on his skin; another child suffering from asthma is relieved when eggs are taken off her diet but not completely freed of attacks until the eggs are actually removed from the house,—all of these are cases of allergy.

Allergy is nothing new to manufacturers of drugs and cosmetics. Almost every manufacturer has had at least one experience with a consumer having an allergic reaction to his product or to some ingredient in the product. To other manufacturers it has meant an added opportunity to work with the doctor in developing aids in the diagonosis of these curious conditions. That the diagnosis is difficult is obvious from the nature of the cases cited above. And, as practically every case of allergy presents a different problem in sensitivity, the job of tracking down the allergen or allergens becomes quite a complicated one.

Hay fever is probably the best known form of allergy. In this case, the sufferer is sensitive to the various pollens such as ragweed, timothy, etc., which are blown about in the air at certain seasons of the year. As the story on diagnosis and treatment of hay fever has been told very often and is quite a familiar one, this article will not consider it further.

Asthma, eczema, dermatitis, hives, various swellings of the skin tissues and membranes, certain migraines and gastro-intestinal disturbances are the other more common forms of allergic disease. The diagnosis for all of these conditions is usually the same because they are simply varying manifestations of the same type of hypersensitiveness toward the common foods, epidermals (hair, fur, feathers, dander), dusts (house dust, industrial dust, sachets, etc.) and bacterial allergens.

The best method which has been developed to determine clues for arriving at individual sensitivity is commonly called skin testing. The earliest reference to work in this field appears to be in 1873 when Blackley demonstrated that the skin of certain individuals with hay fever was sensitive to pollens applied locally to

A typical manifestation of food allergy. The swollen hand was caused by eating foods to which the person was sensitive.

ALLERGENS

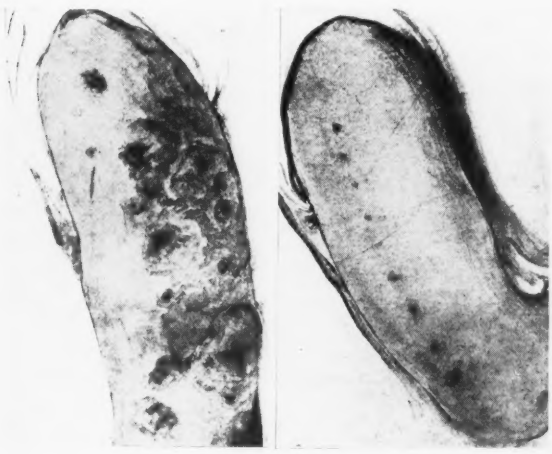
By Elmer Sheets

abrasions of the skin. In 1907, von Pirquet introduced the cutaneous test for tuberculosis, which involves the same technique. There were many other workers and contributors throughout this general period but it seems agreed that O. M. Schloss in 1912 was the first to place the procedure on a firm scientific basis. It was as a result of his work that the skin test in cases of allergic sensitization began to have extensive clinical application.

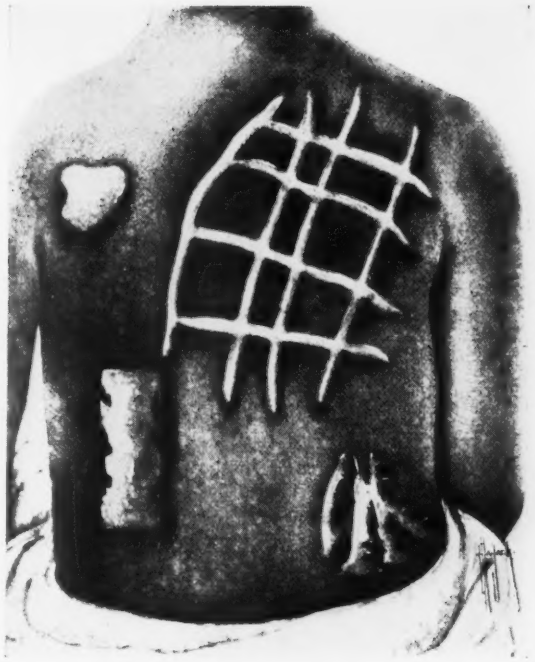
Up until this time the workers in the field had made their own materials for skin testing. But with the more extensive clinical application and the increasing demands for these materials, the drug manufacturers began to be called into the picture and today, Abbott, Arlington, Cutter, Lederle, Parke-Davis, Sharp and Dohme, Squibb and many others produce this type of product.

The products, themselves, are simply extracts of the substances which have been found to cause allergic disturbances. The most common of these are probably the cereals, (particularly wheat), eggs, milk, fish, meat, nuts, legumes, cabbage, potato, celery, tomato, citrus fruits, house dust, orris root, cottonseed, flaxseed, glue, silk, kapok, molds, feathers, wool, furs, and the hair and dander of horses, cats, dogs, rabbits.

These extracts are prepared in powder and in liquid form. The general principle of extraction is the same although the variations are many, as might be expected



At the left are shown some positive reactions to intracutaneous injection of food extracts, and at the right are shown negative reactions to an intracutaneous skin test with food extracts. All of the illustrations used are from W. W. Duke's "Allergy".



These swellings were caused by gentle friction and by a cold application (lower right). Allergic reactions like these to heat, cold and friction are common.

when it is considered that most manufacturers offer up to about 350 extracts of these various food, epidermal, bacterial and miscellaneous proteins. The problem is to get a sterile extract of known concentration, and those interested in the various types of solvents and solutions used may find them in back volumes of New and Non-Official Remedies. The extraction time varies from 24 to 48 hours and the majority of extracts keep for two years or more, although some still require keeping in an ice-box.

Three types of testing prevail in common practice. Two of them are cutaneous tests which consist in bringing the allergens into contact with the skin layers by means of a minute scratch or through surface contact on a small area over a period of a few hours to a few days. The intracutaneous method consists in injecting between 0.01 and 0.05 c. c. of the extract as superficially as possible into the cutis. The upper arm is the area most used for skin testing and generally speaking, about 12-18 materials are tested at a time. When a person is sensitive to a certain protein, it shows up in these skin tests in the form of a large hive or wheal with pseudopods surrounding it.

Thus, to return to the ten-year old boy with asthma, the skin tests conducted in his case showed a positive reaction only to rye flour. Naturally, rye flour was removed from his diet but, surprisingly enough, the attacks continued. Now, however, they showed a certain regularity, they occurred only on Sunday. Investigation showed that on each Sunday the family went for a ride in the car and as a special treat, the boy was

(Continued on page 582)

MEDICINE CODE APPROVED

Pertinent Provisions of the Code

1. Tooth pastes, tooth powders, and mouth washes are in this code and not in the cosmetic code.
2. Medicinal products representing a complete formula for internal or external use on humans or other animals, offered for sale to the public in packages containing directions for use are included. This means that even many of your products might come under the Pharmaceutical and Biological Code, medicines packaged for sale to the public must be filed under this code.
3. Current price list showing discounts to various types of distributors must be filed with the Code Authority.
4. Compensation paid to primary distributors for cooperative advertising, counter and window displays, salesmen's efforts, shall be uniform and not on a basis of discounts of quantity purchases.
5. Secret rebates or special prices are taboo.
6. Hours are restricted to forty per week, with exception of watchmen, firemen, engineers, and outside service employees who are restricted to forty-eight hours, and pharmacists, chemists and executives who are not restricted at all.
7. Wages are set at a minimum of 35 cents per hour in the North, and 32½ cents per hour in the South.

The Code of Fair Competition for the Package Medicine Industry was approved by President Roosevelt on May 15. In his letter of transmission of the Code to the President, General Hugh S. Johnson stated that the code was presented by manufacturers representing eighty-five per cent by volume of the industry. General Johnson further stated that the industry is comprised of about 1,400 concerns having an investment in 1929 of approximately $160,000,000. Aggregate annual sales, stated General Johnson, fell from $318,906,928 in 1929, to about $255,000,000 in 1932. In 1929 the industry employed 26,000 people, of whom 16,400 were wage earners.

The code provides a basic work week of forty hours, a reduction of 4.4 hours below the 1929 average. This reduction is not sufficient to restore employment to the 1929 average, but it should be noted that figures for November, 1933, indicate that employment has increased to about ninety per cent of the 1929 figure. This increase can be attributed to the effects of the President's Reemployment Agreement and to the usual seasonal upturn.

The minimum rates of pay in 1929 were generally less than twenty-five cents per hour in the South, and less than thirty cents per hour in the North. The minimum rates of thirty-five cents per hour in the North, and thirty-two and a half cents per hour in the South as provided in the Code should provide minimum weekly earnings above those in 1929, notwithstanding the reduction in hours.

The Code originally contained a price stabilization provision, but this was eliminated and was replaced by an open price system designed to eliminate some of the competitive abuses in the industry, and to aid in stabilizing conditions in the distributive branches of the industry.

The Code provides for the appointment of representatives to serve on a Drug Industry Coordinating Council which shall have representatives from all the various branches of the Drug Industry and be constituted to act as an advisory and planning body for the whole Drug Industry.

The code in full follows:

ARTICLE I—PURPOSE

To effect the policies of Title I of the National Industrial Recovery Act, the following provisions are established as a Code of Fair Competition for the Package Medicine Industry, and shall be the standard of fair competition for such Industry and shall be binding upon every member thereof.

ARTICLE II—DEFINITIONS

SECTION 1. The term "Package Medicine Industry" as used herein shall mean the Industry, each member of which is engaged in the manufacturing and/or in having manufactured for him under his own brand and specifications, and/or in importing in consumer packages for resale, and/or in packaging from bulk materials under his name or brand, dentifrices, mouth washes and medicinal preparations, for the internal or external use of human beings or other animals and primarily offered for sale to the general public usually as a complete formula in packages with directions for use; and such related branches or subdivisions as may from time to time be included under the provisions of this Code by the President of the United States, after such notice and hearing as he may prescribe.[1]

SECTION 2. The term "member of the Industry" as used herein shall mean any individual, partnership, association, corporation, or other form of enterprise engaged in the Industry, either as an employer or on his or its own behalf.

SECTION 3. The term "employee" as used herein shall mean and include any and all persons engaged in the Industry, however compensated, except a member of the Industry.

SECTION 4. The term "employer" as used herein includes anyone by whom such employee is compensated.

SECTION 5. The term "establishment" as used herein shall mean any plant, laboratory, business branch or department thereof engaged in this Industry.

SECTION 6. The terms "Act" and "Administrator" as used herein shall mean, respectively,

(*Continued on page 639*)

AMBERGRIS

By Harry G. Kelbly

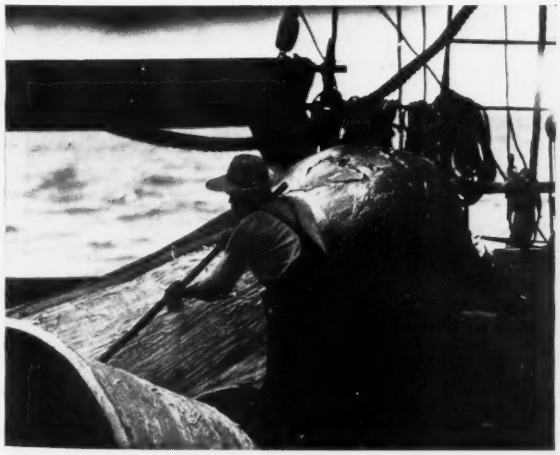
Although ambergris has been known and prized for many centuries, having been an important article of trade in Audoghast in North West Africa before 1000 A. D.; it was well into the Eighteenth Century before anything was known as to its origin or its actual value in industry.

The European attitude toward the commodity during the Middle Ages is well indicated in a text published as late as 1691, the "Pharmacopoeia Londonensis." The learned author of this treatise on the "Art of Healing and Praxis of Chymestry" tells us that:

It is a marine Sulphur, found at the Sea-Shore, chiefly in the Indies, which breaks from Fountains and Caverns of the Sea. It is gray, sweet and smooth; pricked with a needle it sweats out fatness, softens in the heat, and when moist appears black . . . It is hot and dry, and excellent Corroborative; it is discutient, resolutive, alexipharmic, and analeptic; it strengthens the heart and brain, revives and recreates the spirits natural, vital, and animal. Its sweet Sulphur is an excellent Perfume; it is a good preservative against the Plague, and preserves the spirits from infection.

The Quaker whalemen of Nantucket, however, settled beyond doubt the origin of ambergris, as related by Doctor Boylston, a surgeon of Boston, about the end of the first quarter of the Eighteenth Century. The Doctor reports:—

"The most learned part of mankind are still at a loss about many things even in medical use, and particularly were so in what is called ambergris, until our fishermen of Nantucket, in New England, some three or four years past made the discovery. Their account to me is as follows:—cutting up a spermaceti bull-whale, they found accidently in him about twenty



SPERM WHALING—PEELING THE BLACKSKIN

SPERM WHALING—CUTTING IN

pounds weight, more or less, of that drug: after which, they and other such fishermen became very curious in searching all such whales they killed, and it has been since found in lesser quantities in several male whales of that kind, and in no other, and that scarcely in one of a hundred of them."

Since whaling has become an established industry, however, much more is known about ambergris. It is now certain that it is produced only in the sperm whale, possibly only in the male, but authorities differ on this point—some stating that the female sperm whales also produce this material in their systems. It is more definitely known that ambergris is produced in the whales only when they are feeding on squid, or cuttle-fish of which they are inordinately fond. Numbers of the horny beaks or mandibles of the cuttle-fish are almost invariably found embedded in ambergris, and the generally accepted explanation of its formation is that it is a pathological growth caused by the irritation of these indigestible beaks in the whale's stomach.

The large number of small pieces collected on the shores of various countries, chiefly in Australia and New Zealand, and on the shores of the Indian Ocean, indicate the probability that the occurrence of this internal calculus is quite common, but that it is normally got rid of in the ordinary process of nature. Anyone who is familiar with ambergris will realize that for every piece that is collected, hundreds must disintegrate, or remain undiscovered. The finding of large lumps on the seashore is very rare.

Leading factors in ambergris in the New York market are continually receiving spermaceti, gum, wax, water-logged wood and unidentificable substances in the mistaken belief, or pious hope, that they are ambergris. The writer saw at least 50 letters received by only one house since the first of this year, each of which was followed by a sample of some substance for analysis and an offer to sell their "ambergris" for the right price. In each case a polite letter accompanied the return of the sample stating "this is not ambergris." Most of these "finds" were made on the Pacific Coast.

Apart from the fact that ambergris has a specific gravity of somewhere about 0.900 (and therefore floats) and that it melts at a comparatively low temperature, very little is known about its chemistry. A crystalline substance which has been given the name of "ambreine" has been separated from it, but generally speaking, analysis is useless. In color and appearance it varies so widely that it is extremely difficult for any but an expert to identify it.

White ambergris, which has been long exposed to the sea and sun is, especially in the East, considered the finest. It is comparatively rare and found only in small pieces, the largest recorded lump weighing only 20 ounces. The usual fine quality is silver grey or pale golden in color. The color, however, ranges from reddish through dark-grey and brown, sometimes mottled, to absolutely black. The black is the poorest and least valuable, as it is generally mixed with blood and faecal matter which gives it a strong and disagreeable odor. The odor of ambergris is very characteristic but difficult to define; it has been described as "musty," "musky" and "earthy," but, in the fine qualities, it is not unpleasant and is reminiscent of the sea.

Ambergris in perfumery is used in the form of an extract. This is produced in the following manner. Thirty grams are reduced to powder and added to one litre of alcohol. The bottles containing about 5 litres are placed in a shaking machine and agitated for several days at a temperature of 25° to 30° C., this aiding the solution of the ambreine. The bottles are then removed and placed aside with occasional shaking for as long as maturing can be afforded. Filtration is effected a few days before use. Maturing of the extract is more vital in the case of ambergris than in any of the other animal infusions. A raw and unmatured extract is valueless in perfumery. The maintenance of the product at the above-mentioned temperature is the best means of hastening maturation.

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SPERM WHALING—BAILING THE CASE

SPERM WHALING—STOWING THE BLUBBER

Ewing Galloway

INSECT REPELLENTS

A new market is opening up for this type of pharmaceutical cosmetic. A complete discussion of the ingredients of such preparations is given here.

An entirely new field is opening for pharmaceutical cosmetics. This is concerned with the development of products intended to repel insects, and one might add, with the development of preparations to relieve bites in case the repellents do not repel. In a sense insect repellents are related to sunburn preventives in that such products are developing a market for preventive cosmetics. It is very likely that the near future will witness much more emphasis upon preventive cosmetics.

As in the case of sunburn preventives, insect repellents are so intimately related to pharmaceutical products that it is difficult to draw distinctions between them. Hence the term "pharmaceutical cosmetics." Preventive preparations of all kinds are pointing the trend of cosmetics back toward the pharmaceutical branch of the trade from which cosmetics originally sprung and in which a major part of all cosmetics are still made. Such a trend indicates the approaching maturity of the trade and a recognition of the physiological and technical factors upon which effective products must be based.

Insect repellents may be sold in the form of lotions, creams and powders. Physically they are no different from similar cosmetic classifications but they must contain chemicals or other active agents which will repel insects without causing irritation and which will not of themselves be too obnoxious for general use. It is obvious that if a woman must choose between insect bites and the use of a cosmetic which smells to high heaven, she will take the bites. Owing to the paucity of literature on the subject one must fall back upon experience and observation to guide us in the selection of materials that will repel insects. Apparently no one knows whether an insect can smell or whether it is

driven away because the repellent substance causes irritation to its eyes, wings or feelers.

Most of the literature on bugs versus chemicals deals with the speed and effectiveness with which they may be killed. But from a cosmetic or a pharmaceutical viewpoint we are interested in keeping the pest from biting our customers and only incidentally in killing it. Our preparations will not get far if they kill the bug but do not prevent its sting. It would of course be splendid if some one developed a product that would kill the bug instantly before it had a chance to stab us.

This brings us to the question as to how we are going to tell whether the bugs will be repelled by our product or whether they will be attracted by it. We must, moreover, find out whether one type of bug will be repelled and another attracted.

Obviously we may set up a bug incubator in our laboratories and breed mosquitoes, flies, and other pests. A device similar to those used in insect spray laboratories would be useful. A pledget of cotton soaked with our product and placed near a small light to attract insects would reveal whether they would come near it. Of course we should have to carry out our observations under market conditions. Many chemicals will repel insects if enough is used. Hence, our testing sample must not contain more than would be on a similar area of human skin.

Among the best repellents thus far discovered are: the oils of pennyroyal, pine tar, cedar leaf, citronella, sandalwood, melissa, cassia, clove, eucalyptus, birch tar, and caroway. Linalyl and terpenyl acetate are said to be particularly effective. So are deodorized kerosene, ether, chloroform, acetone, tincture of wormwood, camphor, creosote, phenol, menthol, naphthalene, gasoline.

The difficulty in making a compound lies in achieving a product whose evaporation rate will be slow enough to provide effective results over a period of three or four hours. This virtually eliminates the low boiling point solvents such as ether, acetone, choloroform, etc. Possibly emulsions are the best answer to the problem. And the type of emulsion to be employed would depend upon whether the repellent substances is soluble in the inner or outer phase.

The following formulas are presented to guide research and should be carefully tested before sale.

No. 1. Lotion

Oil of birch tar	10%
Turpentine	5 "
Oil of pennyroyal	10 "
Spirit of camphor	7 "
Phenol	2 "
Glycerin	5 "
Water	59 "
Trethanolamine	2 "

Procedure: Mix the oils and turpentine, and the camphor, phenol and glycerin. Add triethanolamine to the water, then mix in the phenol solution and finally add the oil mixture with rapid agitation.

No. 2. Lotion

Oleic acid	2%
Terpenyl acetate	3 "
Oil of pennyroyal	5 "
Oil of citronella	5 "
Oil of cedar leaf	5 "
Olive oil	20 "
Deodorized kerosene	30 "
Hospital green soap	3 "
Ethylene glycol	3 "
Magnesium stearate	7 "
Water	17 "

Procedure: Mix the first six ingredients, add the seventh. Thoroughly mix in the magnesium stearate. Dissolve the soap in a mixture of the water and ethylene glycol. Add this to the first mixture and mix thoroughly.

No. 3. Cream

Glyceryl monostearate	11.0%
Oil of cedar leaf	4. "
Oil of pennyroyal	4. "
Linalyl acetate	3. "
Gasoline	5. "
Menthol	.5 "
Phenol	2. "
Glycerin	5. "
Water	65.5 "

Procedure: Put the glyceryl monostearate into the water add the glycerin and bring the mixture to the boiling point with constant stirring. Keep stirring and when the temperature drops to about 45° C. add the rest of the ingredients which have first been mixed together.

No. 4. Powder

Naphthalene	5%
Oil of cedar leaf	1 "
Oil of sandalwood	1 "
Linalyl acetate	2 "
Zinc stearate	8 "
Zinc peroxide	20 "
Talc	63 "

Procedure: Make in the same manner as face powder. This may be used as face powder or as dusting powder. It is especially indicated for legs, arms, neck and face.

Ambergris

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The use of ambergris extract is confined exclusively to the preparation of fine perfumes. To these it imparts a subtle "velvetness" which is unobtainable with any other raw material. Of the four animal extracts it has the least animal character. While musk possesses the greatest diffusive power, ambergris has the longest duration of evaporation. If a 3 per cent solution of each extract is placed on clean absorbent paper, the musk will last only a few days while the ambergris will last for months. Some of the lighter flower perfumes are blended with ambergris alone, their delicacy of odor being much in tune with this type of extract. Per-

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Ewing Galloway

ATHLETE'S FOOT

By W. E. J. Kirk, M. D.

It can be stated without fear of contradiction, that no skin affection of modern times claims so many victims as the so-called "Athlete's Foot."

While the disease itself, Dermatomycosis, is a distinct one, the term "Athlete's Foot" is quite loosely used, being applied by the average layman to describe any condition of the toes and feet that is accompanied by itching, cracking of the skin between the toes, with more or less loss of skin tissue and by a rather free discharge of a watery straw-colored fluid from the raw and bleeding surface.

A Nation-Wide Menace

No section of the country, and no race or class of people are immune. It affects rich and poor, old and young, and has come to be during the past few years a national menace to the comfort and peace of mind of millions of people.

In this country according to estimates made by the United States Public Health Service, nearly fifty per cent of the adult population are sufferers.

Recent clinical investigations made at the University of California showed that upon admission to the university in a very large group of students examined over fifty per cent were found to be affected, and after the first semester, over 78 per cent were found affected.

A carefully checked investigation made in different parts of the country among athletic clubs, gymnasiums, golf, tennis and swimming clubs showed that over 90 per cent of their members were affected.

The disease is not a stickler for rules. It attacks different people in different ways, forms and degrees of severity, and the causative organism is different in most cases. It may be a true form of Tinea Interdigitale, or a combination of several forms, or in many instances there is found a vagrant type of oragnism that cannot be isolated as any pure strain.

Usually however, the most common varieties of organisms found are: Trichophyton Interdigitale, Trichophyton Rosaceum and Trichophyton Gypseum, the first named being by far the most common.

The organisms that produce the disease in the human skin can be found almost anywheres so general has their dessimination become throughout the country.

Infective Germs Found Everywhere

They have been recovered in virulent and infective forms from subway seats, rails, straps, trolley seats and straps, elevator straps and hand rails, taxi seats and cab floors, wooden and tile floors, diving boards, tee rest benches, swimming pools, medicine balls, horizontal bars, horses, and flying rings, towels, golf clubs, locker and gym floors and benches, tennis rackets, athletic shoes, slippers, etc.

From this nation wide multiple of infectious agencies the disease has fastened itself upon the country to such

an alarming degree that it behooves everyone to take every possible precaution in guarding against contracting the disease and if contracted, to use every precaution to prevent infecting others.

By maintaining the most hygienic surroundings and enforcing the strictest methods of antisepsis in all of the above named potential breeding places a far step ahead will be accomplished in making them safe for "hoofing," hiking," and "sporting."

To one who has never been affected with "Athlete's Foot," such preliminary precautions and antiseptic safeguards seem unnecessary; but to one who is affected or has been a sufferer from this wide-spread menace, the physical agony, mental torture and sleepless nights that it occassions, warrants all possible precautions and no amount of preventative measures can be too severe or exacting.

As in the case of a "Thyphoid Carrier," any person harboring the organisms in his system is a continual source of infection to others. One attack of "Athlete's Foot" does not confer immunity—quite the contrary. For if the initial infection is not thoroughly overcome and the causative organisms with their spores completely killed, a subsequent attack is the more easily invited at the first opportunity.

Again, as in the case of many other germ infections, the person affected may have only a mild attack, and yet he is able to transmit a very severe form of the disease to persons who are susceptible.

"Athlete Foot" Germs Carried by Blood Stream

Much light has been shed upon the etiology, epidermiology, prophylaxis and therapy of Tinea Trichophyton, through the researches of Jadossohn, Williams, Block, and others. Their clinical experiments showed conclusively that living fungi are carried by the blood stream and deposited in various parts of the body quite distant and distinct from the original focus of infection on the toes or fingers, and at these new focal points characteristic lesions are established.

It is not difficult to diagnose ringworm of the feet if one is not particular as to just what form of the disease is present.

Local Symptoms

The local symptoms are pretty much the same in all types. There is present usually intense itching, burning and smarting between the toes and under the toes, with the desire to literally tear the skin from the affected part in order to obtain relief. The skin breaks down and there is a free discharge of "weeping" of a thin to thick yellowish infectious fluid, that many times is so excessive as to make its victim believe he is suffering from excessive perspiration. The affected parts and surrounding tissues are very tender and sensitive. Ordinarily the skin does not offer a very favorable soil for the growth of organisms. However, when the skin surface is rendered more favorable for bacterial growth by moisture, excessive fat, perspiration, etc., the bacteria multiply in sufficient numbers to break down the natural immunity of the skin, and the host is attacked. When this occurs, the characteristic cracking between the toes, the formation of blebs and blisters and other well-known local symptoms develop.

The largest number of invading organisms are found in regions of the body where there is the least friction, as between the fingers or toes, the armpits, in the creases of the groin and genitalia, and all other places where large sebaceous glands are located.

A blow, an existing lesion, or an abrasion lowers the skin's natural resistant factors and the start of an infection takes place. Some types of the organisms thrive best in one or another layer of skin, although in the majority of cases the infection enters by way of the epidermis, where the germs find their ideal soil in the cutis, and it is here that the first changes characteristic of the disease manifest themselves.

Treatment Suggestions

The treatment of "Athlete's Foot" should not always be limited to local measures as is so often the case, for internal medication is very beneficial and in many instances absolutely necessary if a satisfactory and permanent cure is to be obtained.

The affected areas may be compared to "garden patches" of vegetable growths, and the skin to the soil which possesses attributes that favor or hinder the growth of the organisms depending upon the extent to which they are present in the skin.

A permanent cure of "Athlete's Foot" is dependent upon the absolute eradication of all mycelia and spores. It is important to soothe or stimulate the areas of infection, and when in doubt as to which course to persue, one can never do harm by employing soothing applications, except to possibly loose time in the treatment. On the other hand, unwise stimulation at the start of the disease many times irritates the already tender and inflamed areas, causing them to become lazy and temporarily intolerant to curative medication. Besides ofttimes the condition is lighted up many fold and the infection spread.

Long standing cases and those that have been treated with various strong and irritating applications are the ones that are the most stubborn and difficult to cure. Attacks of "Athlete's Foot" show a marked tendency to undergo relapses and recurrences.

Space forbids outlining any very elaborate or comprehensive methods of treatment in the various types and forms of the disease. However a few suggestions follow that will be helpful in controlling the average case.

In treating the various forms of tinea, irritating applications are often required for the fingers and toes, although mildly irritating applications the writer has found more effective. One important point must

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Ewing Galloway

BABY PRODUCTS

The cosmetic industry is expanding to such an extent that its slogan might well be "From the cradle to the grave." From the time in infancy when a bit of talcum powder is dusted on our hind quarters until in old age the mortician dabs a bit of rouge on our cold and clammy faces, we pay tribute to the trade which does its darndest to make us a bit less ugly. So various are the applications of cosmetics to all ages that the trade may be said to have only begun to cultivate its field. Among cosmetic applications one of the most promising is that devoted to babies.

Baby products are increasing in number very rapidly. The most widely used product is as yet powder. There are several kinds of powder available some of which are intended for dusting, prickley heat, rashes and minor eruptions. In addition to powders there are many other baby products, such as antiseptic skin oil, soothing lotions, skin creams, scalp oils, etc.

One can easily imagine additions to this class of cosmetics. For instance, diaper deodorants and irritation preventives which would neutralize urine and keep it from causing irritation when the baby's diaper is not promptly changed. Another outlet is here provided for insect repellants to protect the child against annoyance by flies and against the bites of mosquitoes while it lies in its carriage. As infant's skin burns readily upon the slightest exposure, the sale of sunburn preventive might easily be extended into this field. Still other products might include washing compounds to render diapers sterile, soft and fresh. Water softening compounds to soften the baby's bath water would undoubtedly sell well in hard water districts especially if delicately perfumed. Nursery shampoos made of castile soap or olive oil have been marketed successfully. Possibly sulfonated oil shampoos would do as well. The potential market is so extensive however that several articles would be required to do justice to all, hence this paper will be confined to the powders.

No. 1. Dusting Powder

Purified zinc peroxide	20.00%
Boric acid	3. "
Talc	76.75 "
Perfume	.25 "

The above grade of zinc peroxide has excellent deodorant and soothing properties, hence this powder is especially good for general toilet use.

Procedure: Mix well and sift through bolting cloth.

No. 2. Dusting Powder

Talc	82.75%
Boric acid	5.00 "
Oxyquinoline sulfate	2. "

Zinc stearate	10.00%
Perfume	.25 "

Because of the oxyquinoline sulfate content this powder is a good deodorant besides being more or less antiseptic.

Procedure: Dissolve the oxyquinoline sulfate in a little water. Add sufficient talc to absorb the solution. Allow it to dry thoroughly and sift. Then add this to the rest of the ingredients and mix as before.

No. 3. Dusting Powder

Talc	59.00%
Purified zinc peroxide	10. "
Purified kaolin	15. "
Magnesium stearate	10. "
Boric acid	5.75 "
Para amyl meta cresol	.25 "

This product might be classed as medicated powder because of the presence of a powerful antiseptic.

Procedure: Dissolve the para amyl meta cresol in a little alcohol. Add sufficient kaolin to absorb the solution. Allow the alcohol to evaporate and proceed with the mixing as before.

No. 4. Dusting Powder

Talc	88.75%
Boric acid	7. "
Mild mercuric chloride	4. "
Perfume	.25 "

This powder is intended especially for prickly heat. This is a common summer ailment especially among babies whose mothers keep them swathed like Eskimos.

Procedure: Mix as before.

No. 5. Dusting Powder

Purified zinc peroxide	15%
Precipitated zinc carbonate	10 "
Boric acid	5 "
Talc	65 "
Tincture of benzoin	5 "

This powder is recommended for prickly heat and chaffing.

Procedure: The tincture of benzoin is absorbed with talc, which is allowed to dry. This is mixed with the rest of the ingredients as before.

No. 6. Dusting Powder

Benzocaine	2%
Picric acid (20%)	4 "
Tincture of benzoin	5 "
Boric acid	5 "
Talc	74 "
Purified Kaolin	10 "

This powder is intended for badly chafed skin, diaper scalds, prickly heat and sunburn.

Procedure: The picric acid is mixed with the kaolin. This is thoroughly dried and sifted. The benzocaine and tincture of benzoin are mixed with a little talc until absorbed. Then all ingredients are mixed together thoroughly and sifted.

Ambergris

(Continued from page 578)

fumes having a deeper note require musk and civet as well as ambergris.

Demand from consumers of ambergris varies greatly so that it is very difficult to determine the amount consumed in any one year in the world markets. The extract is permitted to mature as long as possible so that perfumers carry a stock on hand and so are in the market at irregular intervals. The demand is very small at times, again their is a sharp and unpredictable increase for replacement purposes.

As to the actual market value of ambergris, this ranges rather widely in tune with the law of supply and demand and also the quality. High grade lots fetch as much as $30.00 per ounce while the black or inferior grades sell as low as $14.00 per ounce.

Hunting the Allergens

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given that favorite road-stand delicacy, a "hot dog". The doctor communicated with the manufacturer of the wiener and found out that rye flour was used as a filler to prevent shrinkage when cooking, thus justifying the results of the skin test and confirming the diagnosis. For when the "hot dog" was also removed from his diet, the asthmatic attacks ceased completely.

Which does not mean that skin testing offers the solution for every sufferer from an allergic disturbance. In some cases it may be a specific combination of proteins which causes the disease and no clue to the combination is offered by skin tests. In other cases, the skin is simply not a true indicator, while in yet others there are complicating factors. Sometimes, the proper extract does not exist because nobody had considered the material an excitant of allergy, although new ones are being investigated and made every day.

But skin testing has shown the way in what is estimated variously at 70 to 80 per cent. of allergic disorders and has in this way brought relief to thousands, since at least two per cent. of the population suffers from one of the more serious allergic manifestations. And, as the susceptibility to allergic diseases seems quite definitely to be hereditary, their number increases quite rapidly.

The drug manufacturers who engage in the production of these extracts for skin testing are, in common with other institutions and individuals, engaged in constant research not only to improve the product, but also to go beyond in a study of allergens and allergy generally. A hope for the future is, naturally, the discovery of the common factor in all of these substances which are generally recognized as allergenic in nature. Then a more direct therapeutic approach might be possible and perhaps a specific developed for all allergic conditions.

PETROLATUM IN PHARMACEUTICALS AND COSMETICS

Dr. Erich Meyer*

U. S. P. petrolatum finds a wide application in the manufacture of pharmaceutical and cosmetic preparations. Due to its soothing and healing effect, it is used chiefly as a base for pharmaceutical salves, cosmetic creams, likewise for hair dressings, pomades and many other pharmaceutical and cosmetic preparations. Since petrolatum is not a simply defined product, but one which exists in a variety of different types, it may be well to investigate which type of petrolatum is best suited for a given purpose. Only in this way can the fullest benefits be derived from the use of petrolatum.

Petrolatum—Its Composition

Petrolatum is a mixture of solid and liquid hydrocarbons. However, in contrast to paraffin wax, which forms crystalline aggregates, petrolatum is amorphous. We can imagine that petrolatum is a colloidal system in which the solid wax is the external phase and the oil is the internal phase. In other words, the wax absorbs or imbibes oil, as gelatin does water, causing the formation of a swollen jelly-like mass. For a system to form in this manner and not have the liquid separate from the solid hydrocarbons in time, a third component is necessary. This substance acts as a gel-former and is called proto-substance.

Proto-Substance—the Vital Factor

Proto-substance is present in satisfactory quantities in natural petrolatum. However, it is very often removed in the refining process and is not present in so-called synthetic petrolatums. The presence of an ample amount of proto-substance gives petrolatum those properties which are essential. An insufficient amount or a complete lack of proto-substance in the petrolatum upsets the balance of the solid and liquid components of the petrolatum and as a result, such petrolatum has a tendency to separate and cause the objectionable "sweating."

Differences in Purification Methods

U. S. P. petrolatum is a smooth, homogeneous salve of delicate texture and if these properties are to be preserved, no drastic refining process should be applied.

A special fraction of Pennsylvania Crude Oil is separated from other components of the crude oil by distillation and centrifuging, to serve as raw material for the manufacture of petrolatum. This crude petrolatum is then purified by a process technically known as adsorption. This, in principle, consists of bringing the crude petrolatum in contact with very porous materials such as Fuller's Earth, boneblack, etc. The fine pores of the filtering material remove from the crude petrolatum all the impurities which give it color, odor and taste. The more often the purification process is repeated, the lighter will be the color of the petrolatum, hence the color range of petrolatum from amber to snow and alba white.

The adsorption process is lengthy and tedious. Sometimes more rapid methods such as treatment with strong chemicals are used for refining petrolatum. By such methods, very light color can be obtained but it is done at the sacrifice of the quality of the petrolatum, because such chemicals destroy the proto-substance present in the natural petrolatum. Such petrolatums are in reality thin liquids held together by an excess of wax.

Long and Short Fibre Petrolatum

There are certain types of petrolatum of excessively long fibre characteristics which tend to make the finished product too sticky or stringy when applied to the skin. The type of petrolatum used for most pharmaceutical and cosmetic preparations should be of medium but not short fibre. A very short fibre petrolatum is undesirable for most pharmaceutical and cosmetic uses since it is apt to result in a product of thin body and it also lacks the smooth, salve-like consistency of petrolatum of correct fibre characteristics. Shortness of fibre is usually found in synthetic petrolatum and in petrolatum refined by chemical treatment.

Three Groups of Petrolatum

In selecting the proper type of petrolatum for a given purpose, two further important properties should be considered: melting point and consistency. Correct and uniform consistency is one of the most important factors in determining the suitability of a petrolatum for a given purpose. Definite consistency specifications were set which are controlled by special consistency tests.

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SULFONATED LAURYL ALCOHOL IN DRUGS*

By Ivor Griffith

While the cosmetic applications of this new type of raw material has previously been discussed, their medicinal application has been generally neglected.

In the course of the past year or so there has been introduced into the textile trade a group of detergents and penetrants which represent a considerable advance over their cruder predecessors in the same field. These new compounds are available in the form of a fine white powder, soluble in water, and affording colorless neutral solutions.

They are prepared by sulfonating the synthetic higher aliphatic alcohols such as lauryl, oleyl, cetyl and stearyl alcohols. The sulfonation so conducted as to yield alcohol sulfuric acid esters and alkali salts having the general formula R OSO_3Na.

Their unusual properties as textile assistants, particularly those with the lower number of carbon atoms in the homologous series (Cn H2n plus 1 OSO_3 Na) such as the derivatives of lauryl and oleyl alcohol suggested applications for them in the pharmaceutical and cosmetic fields.

Sulfonated lauryl alcohol in aqueous solutions possesses many valuable properties, among which special mention may be made here of the following:

1. It is exceedingly active as an emulsifying and cleansing agent. The surface tension against most dispersed phases, and particularly against olein and neutral fats, is considerably reduced, so that these fats are very easily converted into emulsions. Its high wetting-out power combined with its emulsifying and lathering power, makes it far superior to soap. It is superior to soap in its cleansing and degreasing properties even indistilled water.

2. Agitation in aqueous solutions gives lathers which are more permanent than those given by soap solutions.

3. It is neutral, *i. e.*, it exhibits a pH of about 7 but is entirely unaffected as regards inherent efficiency, whether used as pH 7, above this point, or below it. Thus it can be used with either mineral or organic acids (below pH 7); or can be used with ordinary soap, sodium carbonate or other alkaline solutions (above pH 7) while still retaining its excellent properties of cleansing, penetrating, etc.

4. It is stable under ordinary atmospheric conditions and does not oxidize and turn rancid with the development of objectionable color and odor, as is so often true of soap in certain combinations.

5. Solutions of salts of calcium, magnesium and many of the heavy metals are not affected by it.

The foregoing properties seem to confer on this and similar substances special applicability in the field of pharmaceuticals and cosmetics, particularly where used to replace soap.

Dental authorities have been somewhat antagonistic to the presence of soap in tooth powders and pastes. These sulfonated compounds have all the advantages of soap with none of its disadvantages, and are seemingly non-toxic.

Shampoos, shaving soaps and creams may be compounded with sulfonated lauryl alcohol resulting in non-alkaline products of high detergent qualities.

An unusual bland cleaning compound for painted surfaces is obtained by using the following formula:

Sulfonated lauryl alcohol	20 Gm.
Sheet gelatin	40 Gm.
Water	400 cc.

Dissolve with the aid of heat and pour into small 30 cc. molds and allow to set to a jelly.

One of these forms dissolved in a gallon of warm water produces a non-alkaline detergent fluid that is especially useful in cleaning painted surfaces.

It is not unlikely that the addition of this relatively inert compound to aqueous solutions of antiseptics may afford a liquid of low surface tension and consequent high penetrative qualities.

One attempt to substitute sulfonated lauryl alcohol for the soap used in making compound cresol solution met with failure.

Other applications may occur to other observers and the object of this brief paper is to bring the possibilities of these new compounds to the attention of persons who may have the opportunity for further studying them.

*Reprinted from the American Journal of Pharmacy.

THE PROPRIETARY MEETING

TWENTY-TWO YEAR PRESIDENT FRANK A. BLAIR

With problems vital to the future of proprietary medicines to be discussed, the Proprietary Association annual meeting opened on Wednesday, May 23, with a very heavy attendance. While the major part of the morning session of the first day was spent in the exchange of well wishes between President Frank A. Blair, and the representatives of various retailing, wholesaling and manufacturing groups, those present did not have to wait long for major developments once President Blair gave his address.

For Mr. Blair told of the desirability of cleaning up conditions in the marketing of proprietary remedies. He told what an excellent thing it would be if the Association could take the initiative in spotting those products which should be eliminated from the market. And as an initial step in this direction, Mr. Blair told that the Executive Committee of the Association had voted that a committee be appointed to censor the advertising of the members of the Association.

The afternoon session was spent in a full discussion of this problem leading to the approval of the plan by the membership of the Association. The Planning Committee which had been appointed to study the problem read its report which had been approved by the Executive Committee of the Association. The Committee reporting was composed of W. Y. Preyer, Chairman, Lee H. Bristol, and William S. Groom. The idea as presented called for the appointment of a committee on advertising, which committee might be a sub-committee of the Requirements Committee of the Association which committee was appointed fifteen years ago for the censorship of lable statements on the products of members. This new advertising committee would receive from members copies of their current advertising. The committee would advise the member submitting the copy as to whether or not the committee thought copy proper and advisable to use. The member could heed this advice or disregard it in accordance with his own judgment. But if he continued to advertise continually in a manner which the committee thought objectionable, the committee could report to the Executive Committee of the Association for probable expulsion from membership in the Association.

Mr. Blair insisted that the action by the Association must be more than a gesture. If the members approved the plan, he said, it must be followed through in a serious manner.

Throughout the session every member of the Association was asked to express his opinion of the plan. Practically every one who spoke was heartily in favor of the idea, and it was generally agreed that the plan represented a very long step forward on the part of the members of the Association. Only one member voiced the possibility that he might object to the plan. This member stated that the Food and Drug Administration had forced him to take the disease name, whooping cough off his label, but he still uses this disease name in his advertising. He told Mr. Blair that if the advertising committee set up under the plan should tell him to stop using whooping cough in his advertising he would refuse to do so and would resign from the Association. In answer, Mr. Blair asked him if the Requirements

Committee of the Association had ever asked him to remove whooping cough from his label. The member answered, "No." Whereupon, Mr. Blair stated that the new committee would be just as reasonable on censoring advertising copy as the Requirements Committee has been on censoring label statements.

After full discussion, the subject was put to a vote and not a dissenting vote was heard. In order to make the move possible, it was necessary to amend the by-laws of the Association. The new article describing the new committee and the manner in which it will operate follows:

Article VIII-A
Advertising Advisory Service

1. The personnel and duties of the requirements committee are hereby enlarged to include a sub-committee of three members of the association, appointed annually by the president, which sub-commitee shall supply advisory service relative to advertising as hereinafter provided.

2. The name of the said sub-committee shall be the advisory committee on advertising. Subject to the authorization and approval of the executive committee, the said advertising committee may employ technical assistants, either on a full-time or a consulting basis, or both, to perform the functions hereinafter described, and to transact the routine business of the committee.

3. The members of this association shall at their option submit to the advertising committee proofs or copies of all advertisements (including radio scripts) used by said members in the promotion of their products and shall deliver such proofs or copies to the committee as soon as practicable after such advertisement has been prepared for use. The advertising committee, and/or its technical staff, shall thereupon in its discretion advise and consult with such advertisers regarding any suggestions or criticisms thereto.

4. The advertising committee and/or its technical staff shall act only in an advisory capacity with respect to such suggestions and criticisms, and advertisers shall determine for themselves what action, if any, will be taken pursuant to such advice and/or criticism.

5. The advertising committee and/or its technical staff shall receive complaints against advertisers within or without this association and shall use its good offices in its discretion with respect thereto.

6. The advertising committee and or its technical staff may also, in its discretion, act upon its own initiative in presenting its advice and or criticism of advertising to any advertiser within or without the association.

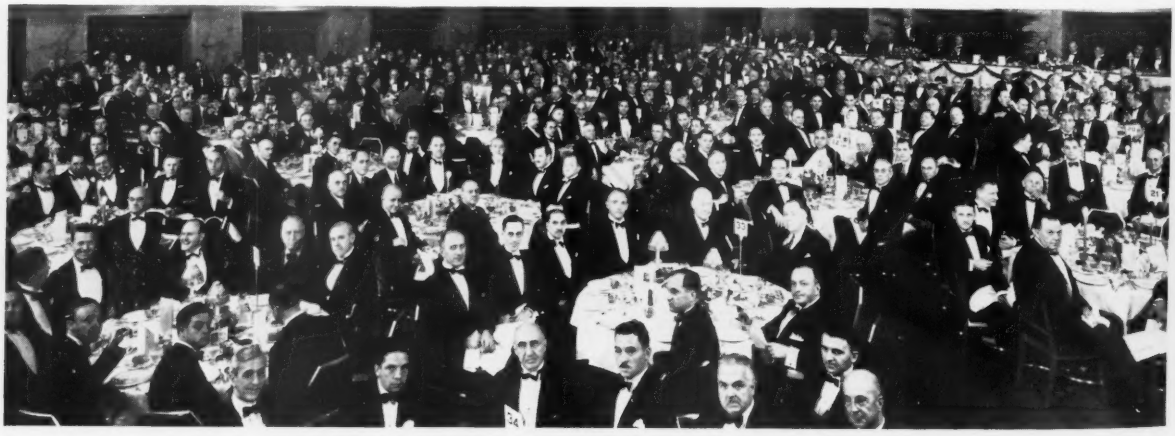
7. Members of this association may be expelled by action of the executive committee after due hearing and full consideration of any case where a member has persistently refused or neglected to act suitably upon the recommendations and or criticisms of the advertising committee.

8. The advertising committee and/or its technical staff may, with the approval of the executive committee, use any other lawful and appropriate means available to further the elimination of false claims and implications, bad taste, unfair competition and other practices inimical to the public interest and the integrity of the package medicine industry.

There was originally an intention to insert a paragraph which would have enabled the committee to take cognizance of misleading and fallacious advertising by non-members and to bring such before the Better Business Bureau, the NRA Code Authority for the industry, and publishers. This was finally decided as being unadvisable, and the paragraph was stricken out of the new article.

Among those introduced during the opening session was Wheeler Sammons of the Drug Institute of America. Mr. Sammons stated that the income of the Drug Institute from membership dues was running at approximately $100,000 per year from retailers, $20,000 from wholesalers, and $40,000 from manufacturers, making a total of $160,000 per year. Expenses, he said were running at approximately $6,000 per month, or $72,000 per year. The American Drug Manufacturers' Association was represented by S. Barksdale Penick, and Carson P. Frailey attended the meeting on the second day. The American Pharmaceutical Manufacturers'

(*Continued on page 600*)



THE FRANK BLAIR TESTIMONIAL DINNER

AT THE A. M. T. A. MEETING

The Associated Manufacturers of Toilet Articles at its convention in the Waldorf Astoria, New York, June 5 to 7, voted to petition the Senate of the United States to substitute a new definition of an adulterated cosmetic in the Copeland bill.

The association objected to the present provision which describes an adulterated cosmetic as one which "bears or contains any poisonous or deleterious substance in such quantities as may render it injurious to the user under the conditions of use prescribed" and in the petition the Senate will be asked that the definition read:—

"A cosmetic shall be deemed to be adulterated if it is dangerous to health under the conditions of use prescribed in the labelling thereof, or if no conditions of use are prescribed, then under such conditions of use as are customary or usual."

Another resolution adopted by the association invited other groups, societies and organizations of manufacturers of cosmetics to affiliate with the association and be given representation on the executive board.

Chapters 278-282 of the laws of the State of Maine relating to the registration and licensing of the sale of cosmetics was the source of considerable discussion and the enactment of such laws and regulations was condemned by resolution. The association also voted to oppose the enforcement of the Maine statute by such legal and constitutional means as are available. The statute was condemned as unjust, discriminatory, unnecessary, vexatious, and tending to absolutely prohibit the sale of many articles of cosmetics at retail.

CECIL SMITH REELECTED PRESIDENT

Cecil Smith, president of Yardley & Co., was re-elected president of the association. Others re-elected included:—second vice-president, F. W. Moss, of Daggett & Ramsdell; treasurer, D. J. Mulster, of Ferd.

BANQUET OF THE A. M. T. A. MEETING

Muhlens; and secretary, C. S. Welch. Edward Plaut, president of Lehn & Fink, Inc., was elected first vice-president.

Members of the executive board are as follows:—Carl Weeks, of The Armand Co.; S. Bayard Colgate, of Colgate-Palmolive-Peet; Earl Means, of the Bristol Myers Co.; E. P. Matthiesen, of Elizabeth Arden, Inc.; J. Rouss, of Bouquet Perfume Co.; C. M. Baker, of Pond's Extract Co.; Northam Warren, of Northam Warren Sales Co.; E. B. Hurlbert, of the J. B. Williams Co.; H. L. Brooks, of Houbigant, Inc.; D. H. McConnell, Jr., of Allied Products, Inc.; Dr. E. G. Thomssen, of the J. R. Watkins Co.; Dr. William T. Haebler, of Van Amerigen-Haebler, Inc.; and R. R. Brown, of American Commercial Alcohol Co.

The entertainment program proved an outstanding success. The innovation of Monte Carlo Night drew a big crowd and the following were the prize winners for turning in the most "money" after the games had closed: Ken Voorhees, 602 thousand "dollars"; Mrs. E. L. King, 477 thousand "dollars"; Chas. Mullane, 380 thousand "dollars". Other prize winners were Bruce Puffer, Mrs. J. G. Scott, Mrs. B. J. Gogarty, Mrs. Stevens, F. L. Graham, V. A. Clark, Mrs. Walker, F. A. Bergman, W. F. Zimmerman, Mrs. F. W. Dodge, J. S. Banden, H. W. Heister.

J. G. Kenlon and A. F. Kammer tied for low gross in the golf tournament with 84 each. S. Corkran had 86, F. J. Lueders, 89, and R. H. Swindell, 90. Other prize winners were A. C. Bergen for the longest drive; Edmund F. Booth for the highest score (135); and Dudley Lum, O. D. Neal, I. H. Budd, and Frank Mahr for nearest to pin. Low net prizes were taken by H. F. Dilyer, W. T. Haebler, A. J. Wilckens, E. W. King, D. E. Picciano, H. L. Brooks, and H. Heister. Kickers prizes were won by Paul Scott, F. W. Webster, Cecil Smith, J. F. Condon, G. W. Meier, Frank Dedrick, R. A. White, and F. W. Beyer.

Among those to address the business sessions of the convention were John W. Power, administration member of the cosmetic code authority; C. W. Godefroy, of the National Hairdressers and Cosmeticologists' Association; Dr. Henry C. Fuller of the Department of Agriculture; Miss Hildegarde Fillmore, associate editor of McCall's Magazine; and Miss Florence E. Wall.

Mr. Power discussed the recently approved cosmetic code and the activities of the Association's trade practice committee. This serves both publishers and advertisers in its efforts to prevent the use of misstatements in advertising which are banned by the code.

Mr. Godefroy advocated cooperation between manufacturers' associations and beauty parlor owners' associations in dealing with state cosmetology laws.

Dr. Fuller discussed the present draft of the Copeland bill and particularly that phase of it which calls for an administrative committee of five not connected with industry. He suggested that the Surgeons General of the National Institute of Health, and of the Army and Navy, might be members of such a board.

Miss Fillmore urged that the cosmetic industry clean up its own house by cooperating to drive out of business that ignorant, vicious element which continues to make harmful products. She particularly deplored the exaggerated claims which are being made for cosmetics today. Miss Wall pointed out that there was an urgent need for sound public relations for the cosmetic industry.

The committee which was responsible for the high standard of entertainment furnished to the members at this Convention consisted of Charles E. Kelly, Chairman; E. W. King, Vice-Chairman; W. C. Young, Treasurer; W. P. Murray, Ass't Treasurer; A. C. Burgund, Charles Fishbeck, B. J. Gogarty, P. W. Hyatt, W. E. Klass, M. Lemmermeyer, Karl Voss.

A. M. T. A. ENTERTAINMENT COMMITTEE

Front Row, left to right: Karl Voss, E. W. King (vice chairman), Charles E. Kelly (Chairman), W. C. Young (Treasurer), M. Lemmermeyer. Standing, left to right: W. E. Klass, Charles Fishbeck, B. J. Gogarty, W. P. Murray, A. C. Burgund, Paul W. Hyatt.

L. L. Lowden

A. L. Van Ameringen

H. F. Croen

F. W. Moss

Hugo Mock

Edwin T. Booth

Sewall Corkran

R. A. White

Charles E. Kelly

Charles S. Welch

Cecil Smith

Frank Dedrick

Martin Schultes

William G. Mennen

M. Lemmermeyer

L. Lacava

F. J. Lueders

Northam Warren

O. Dexter Neal

R. H. Swindell

A. F. Kammer

Robert C. Kelly

Sewall Corkran

John F. Condon, Jr.
William Jacobs
William T. Haebler

G. T. Daggett

Harry Heister

N. O. Newman

E. W. King Frank Mahr

Frederick J. Lueders

Karl Voss

Frank Dedrick

Fred Koster

Dudley F. Lum

A. D. Henderson

Herman Brooks

W. A. Bush
John Beach

Fred Wilckens

Mrs. C. F. Fishbeck

Mrs. Miller

Curt P. Wimmer

James McInnis

George B. Laing

William C. Young

John H. Montgomery

John Kiehl

Francis Chilson

Mrs. Charles F. Fishbeck

Mrs. A. E. Dubey

E. R. Vetterlein

Frank Green

Mrs. Charles E. Kelly

I. H. Budd

Charles F. Fishbeck

B. J. Gogarty

R. A. Kramer

J. R. Dilworth

O. Dexter Neal

Mrs. R. C. Kelly

Ph. Chaleyer

Mrs. J. J. Bukey

Mrs. F. S. Dedrick

Eric Coupey H. W. Miller

George Fries

Mrs. B. J. Gogarty

Ruppert C. Watson

George Tombak

W. H. Dunney, Jr.

G. R. Rinke A. J. Wilckens William Zimmerman

D. E. Piciano

Dr. V. G. Fourman

L. J. Zollinger

E. Hemingway

Fred C. Theile

G. H. Mann

A. Delavigne

C. F. Booth

Miss Coffey

E. M. Fougera

Mrs. E. W. King

Mrs. M. Lemmermeyer

Mrs. E. T. Booth

Jessica Ogilvie

Mrs. C. R. Keiley

Mrs. Guy Lloyd

Mrs. E. R. Mathiessen

THE FLAVORING EXTRACT MEETING

The silver anniversary meeting of the Flavoring Extract Manufacturers' Association proved to be one of the most momentous and one of the best attended meetings which the Association has held. Changes in the constitution and by-laws were made to liberalize the conditions of membership, and protests against certain provisions of the NRA code which is pending for the industry were made.

The necessity of a two-thirds vote of the Executive Committee for membership in the Association was discarded, and now it is only necessary for a prospective member to subscribe to the consitution and by-laws of the Association and to the NRA code when it is approved, and pay the dues to become a member.

President B. H. Smith in his report reviewed the legislative problems of the past year, particularly formation of the NRA code, proposed food and drug legislation, and higher taxes on alcohol. With reference to the proposed food and drug bills, President Smith spoke of the fact that enforcement of the present act is controlled jointly by the three secretaries of Treasury, Commerce, and Agriculture, while the proposed bills limit the enforcement only to the Secretary of Agriculture.

President Smith spoke of the development during the year of sectional groups in New England and Chicago which has resulted in the adjustment of local problems and prompt and close attention to state legislative problems. Mr. Smith suggested that this example be followed in New York, Philadelphia or Baltimore, Ohio, Twin Cities, the West Coast, and the South.

The only way to secure a reduction in alcohol taxes said President Smith, is to fight for a reduction on alcohol taxes for all uses. This is so because the government is not likely to make exemptions for any particular industries, as the problem is very closely associated with the problem of liquor control.

John S. Hall, executive secretary of the Association, gave the specific changes desired by the industry in the proposed Copeland food and drugs act:

Section 7 on design and fill of containers to be amended so that any prosecution must be predicated on the theory that the manufacturer intended to deceive the purchaser by use of the package in question.

Section (f) to be amended to permit the use of distinctive names for foods where the product is not offered for sale under the distinctive name of another article of food.

Sections 12 and 13 providing for a permit system and factory inspection to be entirely deleted. No proof has been presented by the Government to justify these sections.

Section 16 on seizures to be amended to guarantee the Constitutional rights of manufacturers.

Section 24 on effective date and repeal to make the Act become effective two years after passage.

E. L. Brendlinger, Chairman of the Legislative Committee, predicted that the coming year will produce an epidemic of restrictive drug bills, most of which will be introduced by retail pharmacy interests. Now that retail pharmacists have been able to establish a system of minimum retail prices throughout the country, the next step will likely be a general move to prohibit the sale of package medicines and other items, including flavoring extracts in some instances, by anyone but a registered pharmacist.

BANQUET OF THE F. E. M. A. MEETING

Clark Nowland

Frank Green

Bruce Puffer

Mr. and Mrs. Porter

C. Langfield

Charles F. Walden

J. J. Sullivan

Frank Beggs B. H. Smith

Charles O. Homan

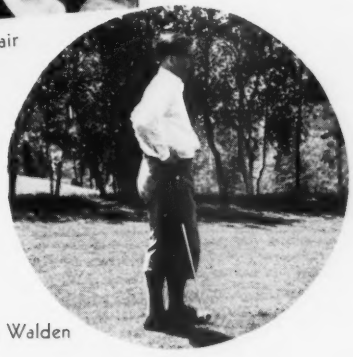
Mr. Shanley

Phipps Moshier

Charles E. Kelly

T. R. Farrell

F. V. Sinclair



Charles F. Walden

John Powell

Victor E. Williams

C. L. Lightfoot

M. Lemmermeyer

Mr. Brendlinger reported that although the flavoring extract industry was among the first to get into action on formulation of an NRA code, the work is now yet completed. This may be advantageous to the industry, however, for the reason that every day brings changes in the situation in Washington, and when the code for the industry is signed, it will be considerably more final than were the codes approved on earlier dates.

Members of the Association opposed the tentative code on two major points: First on price discrimination, which the government proposes to change so as to give the code authority power to classify trade buyers; and second on section VII (13) setting up an industrial relations committee. Because the industry has been entirely free of labor troubles, it was thought that the establishment of such a committee was unnecessary and likely to result in misunderstanding and strife.

Interesting papers presented at the meeting were: "Food and Flavor as an Art," by Philip Youtz, Director of the Brooklyn Museum of Art; "Action of Light Rays in the Presence of a Small Quantity of Air on Flavoring Extracts," by Charles S. Purcell, Chairman of the Research Committee of the Association; "Oxygen—the Enemy of Flavor," by Dr. J. H. Toulouse, Research Director of American Bottlers of Carbonated Beverages.

W. F. Meyer, of Warner Jenkinson Company, was elected president for the coming year. Other officers elected are: Vice-president, George M. Armour; Second Vice-president, Clark Nowland, of George Nowland Company; Third Vice-president, W. J. Sunn, Baker Extract Company; Secretary, E. L. Brendlinger, The Dill Company; Treasurer, Frank L. Beggs, Styron-Beggs Company; Executive Secretary and General Counsel, John S. Hall. Additional members of the Executive Committee: B. H. Smith, Virginia Dare Extract Company; George H. Burnett, Joseph Burnett Company; Fred S. Rogers, McGonagle & Rogers.

The entertainment provided for the meeting was generally conceded by the members attending to be the finest yet offered. The Entertainment Committee under the chairmanship of B. J. Gogarty received much praise not only for the quality of the entertainment and the smoothness with which it was handled, but also for the fact that the committee was able to do all this and still meet expenses and wind up slightly in the black.

Proprietary Meeting

(Continued from page 586)

Association was represented by Carroll Dunham Smith; the National Wholesale Druggists' Association by President Henry Faxon, and Dr. E. L. Newcomb; Associated Manufacturers of Toilet Articles by Charles S. Welch.

A large part of the second day was given over to a discussion of the Package Medicine Industry Code. Earl A. Means, of Bristol-Myers Company, answered questions concerning the fair trade practice provisions of the code. Since this code covers packaged medicines for sale over the counter, practically every drug manufacturing house is subject to its provisions. Even those manufacturers who are primarily pharmaceutical manufacturers, if they package any products of a special formula, packaged with directions for sale over the counter, are subject to this code.

The afternoon of the second day was largely given over to the Foreign Trade Section, Chairman Carleton B. Riker turning the meeting over to Vice-chairman W. L. Bomer. John Abbink, vice-president of the Business Publishers' International, who spoke extemporaneously on "What is Washington Thinking About Exports?" Albert Meo, of the Vick Chemical Company, spoke on "New and Proposed Drug Legislation in South America." John Connolly, of the American Home Products Company, delivered a paper on "American and Foreign Exchange." William Barber, of *El Pharmaceutico*, spoke on "A Suggestion for Unified Export."

W. L. Bomer, of the Bristol-Myers Company, was elected chairman of the Section for the coming year. Carleton B. Riker, of the Sydney Ross Company was elected Vice-chairman, and E. F. Kemp, Secretary.

The morning and afternoon sessions of the Veterinary Section of the Association were well attended. Perhaps the most important discussion at these sessions was given by Dr. George F. Reddish, of the Lambert Company, who presented a most comprehensive report of his studies of those parts of the proposed Copeland Bill which would affect antiseptics and germicides. Dr. Reddish gave his opinion that if these sections of the Copeland Bill are enacted into law, many excellent antiseptics and germicides and antiseptics now on the market will have to be withdrawn since they will be unable to meet the rigid specifications of the Bill which requires them to meet a standard testing method requiring that they compare favorably with the action of a 1 to 80 solution of phenol used for ten minutes at 37° C.

This Section elected as Chairman Ralph Levy, of the Polk, Miller Company; Vice-chairman, Dr. S. D. La Gear, the La Gear Company; Secretary, E. F. Kemp.

Officers of the Association for coming year are: President, Frank A. Blair, Honorary Vice-president, Dr. V. Mott Pierce; First Vice-president, Henry P. Bristol; Second Vice-president, E. K. Hyde; Third Vice-president, James E. Howe; Secretary-Treasurer, Charles P. Tyrrell; Executive Committee members for three years: Z. C. Patten Jr., J. F. Hindes, A. H. Beardsley.

On Wednesday evening the members attended a testimonial given to Frank A. Blair in recognition of his long service to the drug manufacturing industry. The dinner was given in the Grand Ballroom of the Waldorf-Astoria Hotel, and was attended by about 450 men of the industry. The Proprietary Association staged a reception preceding the dinner. Robert L. Lund was toastmaster, and James F. Hoge was the speaker to pay tribute for the gathering to Mr. Blair.

RADIANT *now!*

Nothing was wrong with her . . .
Her constitution was good . . .
And still she had no pep, no life . . .

***She needed* VIOLET RAY**

Now . . . feel your perfume's pulse

Nothing exactly wrong with it . . .
Its composition is good . . .
And still it has no pep, no life . . .

It needs RADIONDE
the perfume's violet ray

See reverse side of this page for details

ROURE-BERTRAND FILS & JUSTIN DUPONT

GRASSE PARIS ARGENTEUIL

Trade Mark

ESTABLISHED 1820

Sole Representative in the United States and Canada:

GEORGE SILVER IMPORT COMPANY
461 Fourth Avenue New York

CHICAGO: 722 West Austin Ave. (Phone: HAYmarket 0991)
LOS ANGELES: 819 Santee St., Room 622 (Phone: TUcker 6453)

THE FIRST BORN OF A NEW FAMILY

RADIONDE LAMBDA

This is not a compound nor an old product offered under a new name

Obtained by a New Process, this is the first of a line of new products which will create a new conception in perfume blending. Gives a flowery top note, and harmonizes with every type of odor. It will not change the character of any composition, but improves the quality.

RADIONDE LAMBDA

Gives life to the perfume and irradiates its fragrance

Trade Mark

ROURE-BERTRAND FILS & JUSTIN DUPONT

GRASSE PARIS ARGENTEUIL

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NEW MEDICINES ABROAD

Dilaudid-Atropine Ampoules. Each contains 0.004 g dilaudid hydrochloride and 0.005 g. atropine sulfate. Packages of 5 ampoules. Fa. L. Knoll, Ludwigshafen.

Urisolan-Granulate. Mixture contains Natr. Sulfur., Natr. citric., Lithium, Natr. tartar., Hexamethylentetr., Extr. Uvae ursi, Extr. Herniariae, Gelatina laba. Package of 100 g. Pharma, G.m.b.H., Aussig.

Bromcalciumtheosan Dragees 56% theobromine, 12% calcium, 25% bromine. Twenty to a package. Fa. Dr. Wander, G.m.b.H., Vienna XXI.

Bi-rods 2.40 g. iodoform, 5.00 g. bismuth subnitrate, 01. Cacao to 24.00 g. Ten to a package. Tewega, Vienna III.

Antitussin Salve. Salve contains 5% difluordiphenyl, lanolin and vaseline. Packages of 30 g. Pharma., G.m.b H., Aussig.

Antinodin Ampoules. Packages of 6 ampoules. Each ampoule contains 33.30% quinine dihydrochloride, 8.30% crystallized sodium acetate, 20% ester ethyl of carbaminic acid, 2% p-aminobenzoyldiethylaminoethanol hydrochloride, 36.40% distilled water. Fa. Dr. E. Zerner, Vienna XVI.

Agojod Dragees. Each contains 0.05 g. resublimed iodine in a tablet mass. Thirty to a package. Fa. Dr. Wander, G.m.b.H.

Adrenal-Inhalate "Esseff" for bronchial asthma, bronchitis, grippe, pneumonia, etc. contains kidney hormone in combination suitable for inhalation. The acid concentration of the liquid, by a special process, is maintained at a pH of 4.0 to 5.0 and the preservative used is tasteless and free from irritation. Inhale in special equipment for 4 minutes and again for 4 minutes after 15 minutes' rest. As a preventative, inhale 5 times daily for 2 to 3 minutes, especially before retiring. Sauerstoff-Fabrik, Berlin, G.m.b.H., Berlin N65.

Ande. According to Griebel and Weiss, this preparation for corns is a 5% solution of caustic soda colored with fluorescein. A. Krauss, Dusseldorf.

Dr. Richter's Antiasthmatikum. This is a compound for smoking, used in treating asthma, and contains finely cut strammonium leaves. Heinfried-Laboratoriums der Schloss-Apotheke in Hannover.

Antischin-Bandage, for burns. The bandage is impregnated with providoform. The pain-removing mass is spread upon the bandage in such a way that it will not fall off nor mix with the secretion from the wound. The package is impermeable to air and dust. Verbandstoff-Fabrik W. Sohngen & Co., Wiesbaden.

Argala-Asthma Powder. The formula has been altered and now contains: Herba Lobeliae plv. gr., Fol. Stramonii plv. gr., Kal. nitric. Adler-Apotheke Paul Sades, Berlin-Friedenau.

Arsenosol. Bath for anemia, organic and functional nervous disorders, skin diseases, debility, etc., contains an arsenic component in combination with salts which correspond to natural arsenic baths. Novopin-Fabrik, Pharmacosma, G.m.b.H., Berlin-Johannistal.

Arteriol is claimed to be a separated biochemical complex, to be used as a preventative against apoplectic strokes and arteriosclerosis. According to Griebel and Weiss, the 6 powder capsules contain 6-13 g. of white powder which has the following composition: No. 1, magnesium phosphate; No. 2, potassium sulfate; No. 3, disodium phosphate; No. 4, calcium phosphate; No. 5, sodium sulfate; No. 6, magnesium peroxide. Bartschat.

Arteriosal are dark olive-colored tablets containing "Wagner's chlorophyll composition," milled nettle leaves, cacao and milk sugar. They are recommended for rejuvenation and healing of hardened arteries. One tablet thrice daily before meals. Apotheker Max Wagners Chemischer Fabrik, Leipzig 05.

Estersil. Salicyl-hydroxy-acetic ethyl and propyl esters 98%, lavender oil 2%. This is an analgesic application for rheumatic conditions, lumbago, sciatica, neuritis. It comes in 2 ounce bottles. Directions: to be gently rubbed on the affected part. Johnson and Sons, Ltd., Hendon Way, London, N. W. 4.

Tonicine (Female). A general tonic, which stimulates nerve center and increases metabolism. Useful in menstrual disorders, at the menopause, in asthenia, and neurasthenia. Each fluid dram contains hormones representing fresh ovary 5 grains, strychnine sulfate 1/200 grain, sodium glycerophosphate 1 grain. Dose: two teaspoonfuls before meals. Packing: bottles of 8 fluid ounces. Reed and Carnrick (Canada), Ltd., Toronto, Ont., Canada.

Veintrope M. Red tablets containing parathyroid 0.001 gm., testicular extract 0.035 gm., suprarenal 0.005 gm., pancreas 0.1 gm., posterior pituitary 0.001 gm., extract of horse chestnut 0.03 gm., extract of hamamelis virginiana 0.03 gm., nux vomica 0.005 gm., excipient to 0.25 gm. Used in treatment of varicose veins, haemorrhoids, phlebitis. Dose: two tablets one hour before the two principal meals. Packing: bottle of 35 tablets. Continental Laboratories, Ltd., 30, Marsham St., London, S. W. 1.

Aspro for neuralgia, rheumatism, etc., are 0.42 g. tablets containing, according to Dr. Aufrecht, acetylsalicylic acid and pyramidon. Apotheker J. Hanon, Amiens.

Isarol "Ciba" is the ammonium salt of the sulfonated distillation product from bituminous shale. It is a thick substance with a red-brown color and gives a clear solution with water, glycerine, or alcohol. The com-

STURGE'S STANDARD

Precipitated Chalk

The one essential quality which experienced tooth paste manufacturers have always demanded in precipitated chalk is the *unvarying uniformity* in the *specific grade* adopted for the formulae.

Since the beginning of tooth paste manufacture, this quality has been an accepted fact in Sturge's Standard Precipitated Chalk. Users of this chalk know from experience that they need have no fear of tooth paste hardening in the tube or other spoilage, from chalk variation.

Naturally, Sturge's Standard Precipitated Chalk is also U.S.P., free from grit, free alkali and metals, and has a fine white natural color.

JOHN & E. STURGE, Ltd.
BIRMINGHAM ENGLAND

Distributors:

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pound contains 10% sulfur. The preparation is useful as an antiseptic, reducing and resorption-promoting substance in dermatology, gynecology and urology in the form of salves and suppositories. Ciba-Berlin A.G., Berlin-Wilmersdorf.

Lebra-Herb Oil, recommended for the treatment of rheumatism, etc., is a liniment containing turpentine, eucalyptus, and peppermint oils. Drogerie Lehmann-Brandenberger, Oberhofen, Thun, Switzerland.

Magenpulver is said to contain 4 g. Extr. Belladonna, 250 g. bismuth subnitrate, 250 g. sodium bicarbonate, and 500 g. magnesia. According to Apa, however, the preparation contains only 25% magnesia and 50% of the bicarbonate. Apparently the belladonna extract is inactive. Wiedenmann, Basel.

Olbas is an ethereal oil mixture containing 25% peppermint oil (Japanese menthol-free oil). Other oils recognized were a pinene-containing oil (oil of terpentine or pine oil) and a cineol-containing oil, probably oil of eucalyptus. The original oil contained 17.7% menthol and 67% cineol. Ges. f. Po-Ho-Verbreitung, Po-Ho-Co. Basel 2.

Olcia Toothpaste is a mixture of calcium carbonate and magnesium carbonate rubbed with glycerine, colored with ethereal oils, mainly mentholated oils. Olcia, Paris.

Organin. "A natural health and strength compound for sick and well" is an aqueous alcoholic solution of honey and plant extracts. The alcohol contains fusel oil. A hydroxyanthraquinone derivative (Emodin) was detected. Kakus-Werke, Solothrun, Switzerland.

Per-Abrodil is a 35%, germ-free, aqueous solution of 3, 5-diiodo-4-pyridone-N-acetic acid diethanolamine, containing 0.175 g. iodine per c. c. It is used as a shadow-producing material in X-ray photography of the renal cavity, the ureter, the bladder; also for the mascular system, joints and fistulas. The dose for adults is one 20 c. c. ampule, children 8-10 c. c. and infants 2-3 c. c. Bayer-Meister-Lucius, I. G. Leverkusen a/Rh.

Phoenix-Balkanzwiebel Drops recommended for the treatment of arterial calcification, heart ailments, hemmorhoids, etc., contain, according to Apa, garlic juice and 0.025% mustard oil. Onion juice is probably added to bind the odor and 0.17% salicylic acid is the preservative.

Prominal, a specific for epilepsy, is N-methyl-ethyl-phenyl-malonylurea; this is a crystalline powder, almost tasteless, m. p. 176° C. and difficultly soluble in boiling water. The dose is suited to the individual, it may vary from 0.1-0.6 g. daily. The effective does is generally 0.2-0.4 g. or 1 to 2 tablets daily. Even in large therapeutic doses, the preparation will not cause drowsiness so that the epileptic may continue unhindered with his occupation. Bayer-Meister-Lucius, I. G., Leverkusen a/Rh. and E. Merck, Darmstadt.

"Santiago" Powder consists of talcum 55.4%, ferric oxide 4.5%, zinc oxide 31.2% and an organic component containing sulfur (8.9%). Camphor and aromatics are also present.

Androstin. Ampoule A contains the active, water-soluble ingredient of 16 g. fresh male sexual glands and distilled water to 1.70 c. c. Ampoule B contains the lipoid-soluble component of 16 g. male glands and 01. Sesami to 1.70 c. c. Packages of 3 ampoules A and 3 ampoules B.

Tablets contain the water-and lipoid-soluble constituents of 8 g. glands in tablet form. Packages of 30 tablets. Ges. f. chem. Industrie, Basel.

Interphan. For injection—10% or 15% solution of the triethanolamine salt of 2-phenal cinchonic acid. Packages contain five c. c. ampoules. Pearls—each contains 0.50 g. of the above salt. Packages of 20 pearls. Interpharma Gesellschaft, Prague.

Surparine Tablets. Each contains 0.04 g. Perparin and 0.0015 g. Novatropin. Packages of 20 tablets.

For injection: each 2 c. c. ampoule contains 0.04 g. Perparin, 0.0015 g. Novatropin and 0.06 g. Ethyl-methane in distilled water. Packages of 6 ampoules.

Perparin is the hydrochloride of 6, 7-diethoxy-1 (3, 4-diethoxy-benzyl)-isoquinoline. Novatropin is homatropinemethylbromide. Sanabo-Chinoin, Vienna I.

Deriphyllin-Ampoules. Each ampoule contains 0.412 g. theophylline-hydroxyamine and distilled water per c. c. Packages contain 6 ampoules. Chem: pharm. A.G., Bad Homburg.

Deriphyllin-Cones. Each contains 0.618 g. theophylline-hydroxyamine, 01. Cacao. Six to a package. Same manufacturer.

Atmanod, "the safe healing agent," according to Griebel and Weiss is a homeopathic dressing in which characteristic components cannot be identified. Claimed ingredients are Belladonna liquid, Ignatia, Coffea, Laurocerasus and Cactus grandus. Atmanod & Co., Berlin-Steglitz.

Eyedrops Esco 1. According to Griebe & Weiss, this mixture is a 1% solution of boric acid colored with a dark-brown dye.

Beridormin are white tablets made of bromdiethyl-acetylcarbamide D.A.-B 6, p. 35. Dose: for producing sleep, 1 to 2 tablets before retiring; as a sedative, ½ to 1 tablets 3 times daily. Chem. Fabrik Berliner G.m.b.H., Oranienburg.

Biox-Skin Cream. This skin cleanser has as its essential ingredient an "isocholesterin emulsion." Max Elb, A.G., Dresden.

Bio-Yggdrasyl, Bath Tablets, No. 3, recommended for nerve, stomach and heart ailments as the best addition to the bath. According to Girebel and Weiss these tablets, weighing 18 g. each, are red colored and perfumed by an ethereal oil and contain sodium carbonate and a crystalline organic acid. Starch and paraffin separate the ingredients.

Bononerv-Powder, for headache and toothache, grippe, neuralgia, alcohol and tobacco abuse, lassitude, etc. The powders contain phenyldimethylpyrazolone,

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Veramon, "Midolor," citric acid and caffeine. For headaches dissolve one powder in water, for other ailments, one powder three times daily. Adler-Apotheke Dr. A. Camerer, Augsburg.

Calcio-Coramin "Ciba" is di-pyridine-beta-carboxylic acid diethylamide-calcium sulfocyanide, a double compound with strong expectorant power for oral adminstration in bronchitis, congestion, bronchial asthma, angina pectoris; alternately with Digifolin "Ciba", it is useful in the treatment of cardiac insufficiency, post-infective myocarditis (Grippe, etc.). It is also recommended for relieving overstrain and threatened heat stroke. Dose: 2 tablets (0.4 g.) when necessary 3 times daily after meals; smaller doses for children according to age. Ciba A.G., Berlin-Wilmersdorf.

Calciumbromatyl, for general nervous conditions, especially spasmophily, Tetany, Laryngospasmus, etc., in children, is a lime-bromine preparation containing 10% calcium bromate. One tablespoonful 3 to 5 times daily. Dr. Beyrich & Co., G.m.b.H., Neugreussing bei Dobeln i. Sa.

Calciumchloratyll for general nervous conditions, purpura, salt fever, asthma, etc. is a lime preparation containing 10% calcium chlorate. Dose: one tablespoonful 3 to 6 times daily. Same manufacturer.

Camphopin, a liniment for rheumatic pains, contains chloroform with potash soap, salicylic acid, mustard oil and rosemary oil. Novopin-Fabrik Pharmacosma G.m.b.H., Berlin-Johannistal.

Chromosmon, as an antidote for gas poisoning (carbon monoxide, illuminating gas, flue gas, coke-oven gas, waste-water and sewer-gas), is a methylene blue-sugar solution. Packed in boxes of 4 to 20 ten c. c. ampoules, 10-20 c. c. (½ ampoules), administered intravenously. Chemosan Union & Fritz Pezoldt A.G., Vienna III.

Circulin, blood and nerve food "guaranteed irradiated," according to Griebel and Weiss is comminuted flaxseed. Hermann Lampert, Zella-Mehlis.

Compligon, for treating gonorrheal complications, is a bacteria free gono coccus toxin prepared by a patented process. It contains Entoxine separated by the live bacteria along with the substance set free when the gonococcus is killed. The uniform activity of the preparation is thus assured. The 8 one c. c. ampoules contain: I-IV, increasing concentrations of Compligon; V-VIII, undiluted Compligon. In addition to this package for therapeutic purposes, another for serodiagnosis is sold. This contains 10 c. c. Compligon. Schering-Kahlbaum A.G., Berlin N. 65.

Contralgin-Pasta is used for anesthetizing and disinfecting healthy, inflamed and injured mucous membrane and is useful in the extraction of milk teeth, removing tartar, opening abcesses, and in relieving after-effects of dental surgery. The preparation contains 2% Pantocaine and Solbrol as the disinfectant. The paste base is fat-free and clings to the mucous membrane, assuring lasting anesthesia. Bayer-Meister-Lucius, I.G., Leverkusen a Rh.

Diabetiker-Couverture contains 47.2% of fat and 42.3% of carbohydrate, as well as other nitrogen-free compounds. The carbohydrate is chiefly Sionon (Sorbite), Marzipan-Fabrik, Lubeck.

Athlete's Foot

(*Continued from page 580*)

always be born in mind,—*never apply an irritating medication as a preliminary application if the skin is highly inflamed and tender, or if the affected area has been the seat of many relapses or recurrences.*

By observing this rule many a worry and heartache will be avoided.

Local Treatment

Local treatment consists of bathing the affected parts in hot borax or bicarbonate of soda water twice a day for fifteen or twenty minutes, and while soaking, gently massage or rub away the dead skin and dried discharges between and around the toes. Then dry gently and apply any good antiseptic medication and an antiseptic dusting powder between the toes that are not affected as well as to dust some of the powder in the bottom of the shoes. If the feet perspire freely, the powder should be placed in the stocking as well. One of the simplest precautions against reinfection is to daily wash out the inside of the shoes with a strong antiseptic solution, allowing them to dry without wiping them out. The inside of the shoes of "sufferers" is one of the very best breeding places for the tinea organisms, and one of the most frequent causes of reinfection.

As a precautionary measure persons susceptible to "Athlete's Foot" should not go barefooted and should always after bathing, thoroughly dry the toes and feet. Dryness of the toes is essential in preventing reinfection.

The experiments of Homans have pointed out the danger of streptococci responsible for lymphangitis and cellulitis entering the system through a ringworm lesion.

It is this ever present danger of a simple affection of the toes or fingers becoming a serious secondary metastatic infection in other parts of the body, that makes "Athlete's Foot" a skin condition that should not be neglected, or lightly treated, but checked and permanently cured in the shortest possible time.

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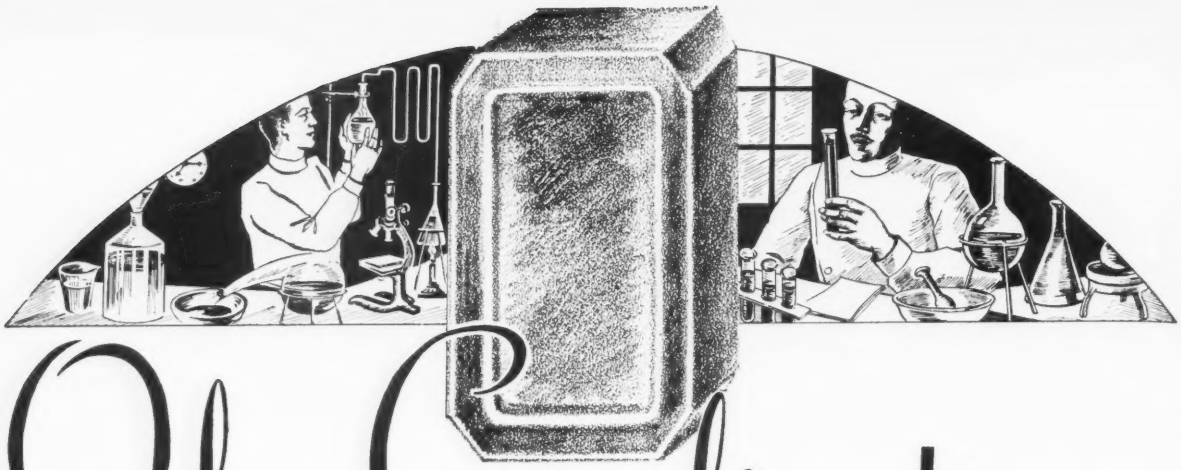

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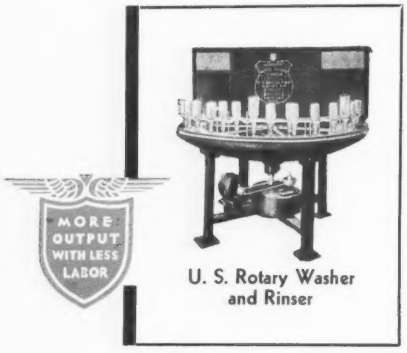

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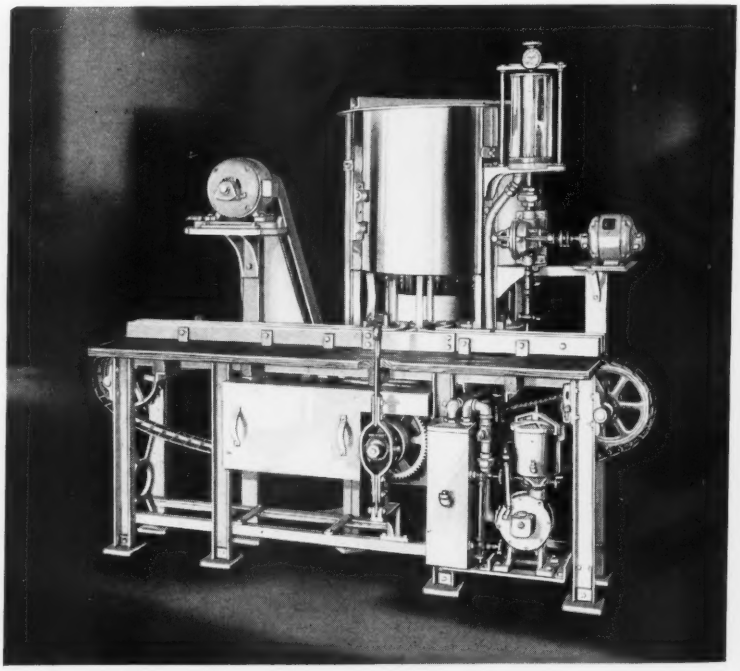

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PACKAGING NOTES

Edited by Elmer Sheets

A Real Test of Packaging Reactions

We had the opportunity recently of participating in quite an unsual package test conducted by the New York School of Fine and Applied Art. George Switzer has been conducting a course there in packaging design. In order to approximate actual industrial conditions, he organized the class in four competitive companies. Each group had to decide on a name for the company and its products, develop and appropriate trade-mark, develop and appropriate lettering style and color scheme for the company's packages, achieve a family resemblance in all its packages, and execute the design of the individual packages so as to give maximum service and sales. Under this plan, packages were designed for twenty-two different products including cod liver oil, tooth paste, manicure set, perfume, face powder and dusting powder.

The day we were there was the end of the school year and the packages of all four companies were on display in each of the twenty-two groups. The Judging Committee, of which we were one, was composed of industrial editors and others who were presumed to judge the packages from the professional merchandising viewpoint. The packages were also judged by the visitors to the exhibit acting as consumers. "A comparison of the decision of these two groups," according to the prospectus of the contest, "will tend to answer the question: does the merchandising profession give consumers the kind of packaging they want?" There were seven judges and 391 consumer votes all the voting was done individually, and the entire thing was set up to give a fair and accurate comparison of the consumer reaction vs. merchandising reaction.

When the votes were counted and tabulated, it was found that the judges and the consumers had agreed on only eleven packages out of the twenty-two. Furthermore, the two most popular packages from the consumer viewpoint were not the best in their groups according to the votes of the judges.

The members of the faculty of the school also voted as individuals. Their point of view was presumably that of artist-designer. They were found to agree with the judgment of the consumer on thirteen packages and with the judgment of the judges on a similar number—thirteen. The three groups selected the same package in eight of the product classifications.

Those are the facts—you can draw your own conclusions.

Below we have the drug and cosmetic packages which we considered best in each group. It so happens that all are by the same company. A tabulation of the returns shows that our judgment of these packages was confirmed by both the judges' group and the teachers' group, but that the consumers' group picked different tooth paste and dusting powder packages. In other words, with those two exceptions, we all agreed on the packages shown here. The cod liver oil package, incidently, received more judges' votes than any other of the 88 packages displayed.

Tubes of This and That

Speaking of collapsible tubes, we understand that there is considerable work being done on turning out a tube made of another metal. The talk is all pretty much *sub rosa*, under the hat, and all that sort of thing, so please don't ask us anything more about it yet.

The people with the paper tubes seem to think also

(*Continued on page 619*)

SUGGESTIONS FOR

Baby Powder

Baby powders might easily be merchandised upon the superior appearance of a package as well as upon the soothing and antiseptic properties of the powder itself. At present, there seems to be no package combining the obvious advantages of both appeals. On one hand there is the package that is severely ethical in its appearance and on the other, the overdecorated and usually cheaply decorated "baby" package. The usual container for this product is either so severely gotten up that it suggests something painful rather than something soothing and helpful; or it is so overdecorated with all sorts of fancy "baby" designs and complicated color schemes that again the decoration is inappropriate for the contents. The opportunities for charm and beauty offered by this subject, if used to the full advantage, would certainly reap its reward in the way of increased sales. The baby powder is in almost constant use and it has a very definite and usually conspicuous place in the nursery. Why, in addition to being efficient and practical, should it not be more aware of its surroundings and more in keeping with them?

A baby powder package should first of all have a tightly fitting closure so that even a very clever baby could not open it and mistake it for something to eat, if given the opportunity by some careless nursemaid. In the second place, it should be unbreakable yet transparent so that the user may always know just how much remains in the package, and not have to shake the container frantically in an effort to dislodge some last few grains of powder which may or may not be there, or have to postpone activities until a new package is secured. If in addition, the powder could be applied in the form of a fine spray, through some bellows-like effect inherent in the properties of the container-material, that would seem to be an additional advantage, although, lacking this, a sifter top would do very nicely. And finally, the package should be decorated so that at one glance it says "Baby" and so that it is at home in the color scheme of any nursery.

We have, therefore, chosen for this package a container of celluloid or of cellulose acetate, or of some other transparent material. If the container were small enough to be molded, a screw cap would probably be the best closure; if the container were larger in size, necessitating its production from sheets, a metal sifter top would probably work out best. A photograph of a playing baby immediately suggests ease, rest, and comfort, all of which symbolize the effects of a good baby powder. The simple bands of color around the container add a note of brightness to the package. These bands, by the way, could contain all the necessary information as to brand, manufacturer, ingredients, etc.

That there are difficulties in the way of carrying out this packaging suggestion is admitted and it would mean close cooperation between the powder manufacturer and the maker of the package. But enough has

NEW PACKAGES

By Josephine von Miklos, Ph. D.

been done with materials such as we have suggested to indicate that a package of this sort could be produced and the editors of THE DRUG AND COSMETIC INDUSTRY will doubtless be glad to cooperate by suggesting organizations equipped to work with the baby powder manufacturer in securing a package of this kind.

Baby Powder: Photograph printed in blue or pink half-tone. Bands blue and pink. Top blue or pink. Copy in reverse plate on colored bands and on cap.

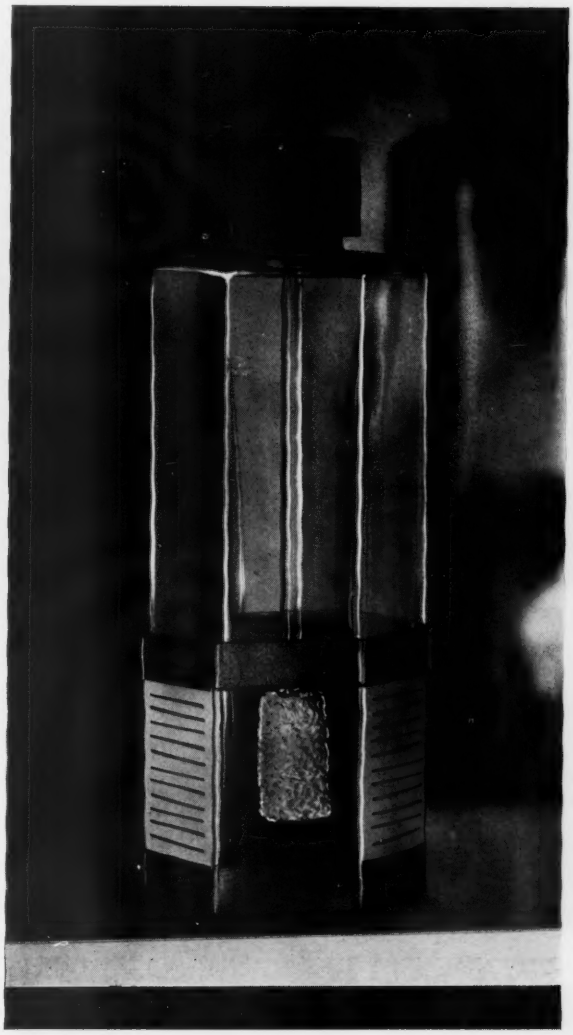
The ideal package for an insect repellent cream should above all be able to express one main idea and that is, to save us from those annoying and sometimes dangerous bites which so often take away all the pleasure of country life. In other words, when we go to our medicine chest to get protection, there should be a jar that, among all others, immediately cries: "BUGS"!

We have designed a container that tries to put across this idea simply and effectively. We have taken a horrid looking, exaggeratedly grotesque insect-monster and worked it into a photographic label on a dark green glass jar with any conventional type of closure. We believe that suggestive designs, as we may call a photo-

(*Continued on page 619*)

Insect Repellent

"Athlete's Foot"



BRIDGEPORT

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In larger sizes, molded containers encounter high relative costs, but obtain consideration as de luxe containers for which cheaper containers serve as refills

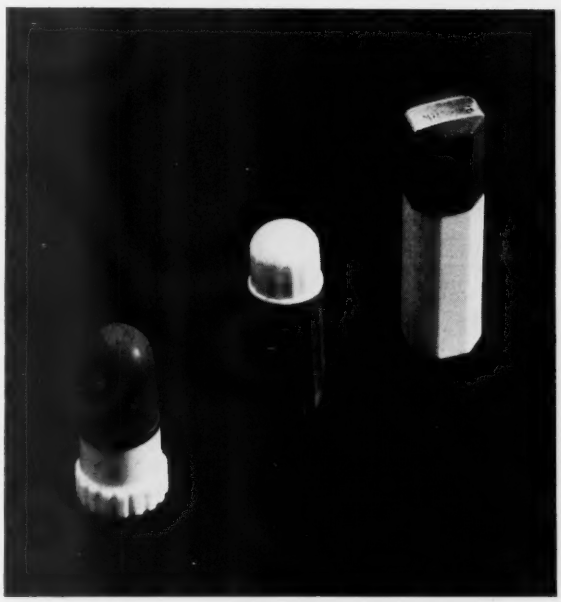
The Future of Plastic Containers

By Richard S. Childs*

The packaging of rouge, lipstick, cold cream, powder compacts, and other toilet and cosmetic items calls for ceaseless invention and variety. Many such packages are destined for milady's toilet table, to remain conspicuously visible in the boudoir, rather than to be hidden away in the bathroom medicine closet; therefore, style is important. Even more important is the necessity for brilliancy and gayety in such packages, so as to induce the druggist to put them conspicuously on his counters and in his windows, instead of under the counter. Both of these requirements seem to be met in ideal fashion by molded plastic containers for they offer every color of the rainbow and are easily adapted to any style devised by the designer's hand.

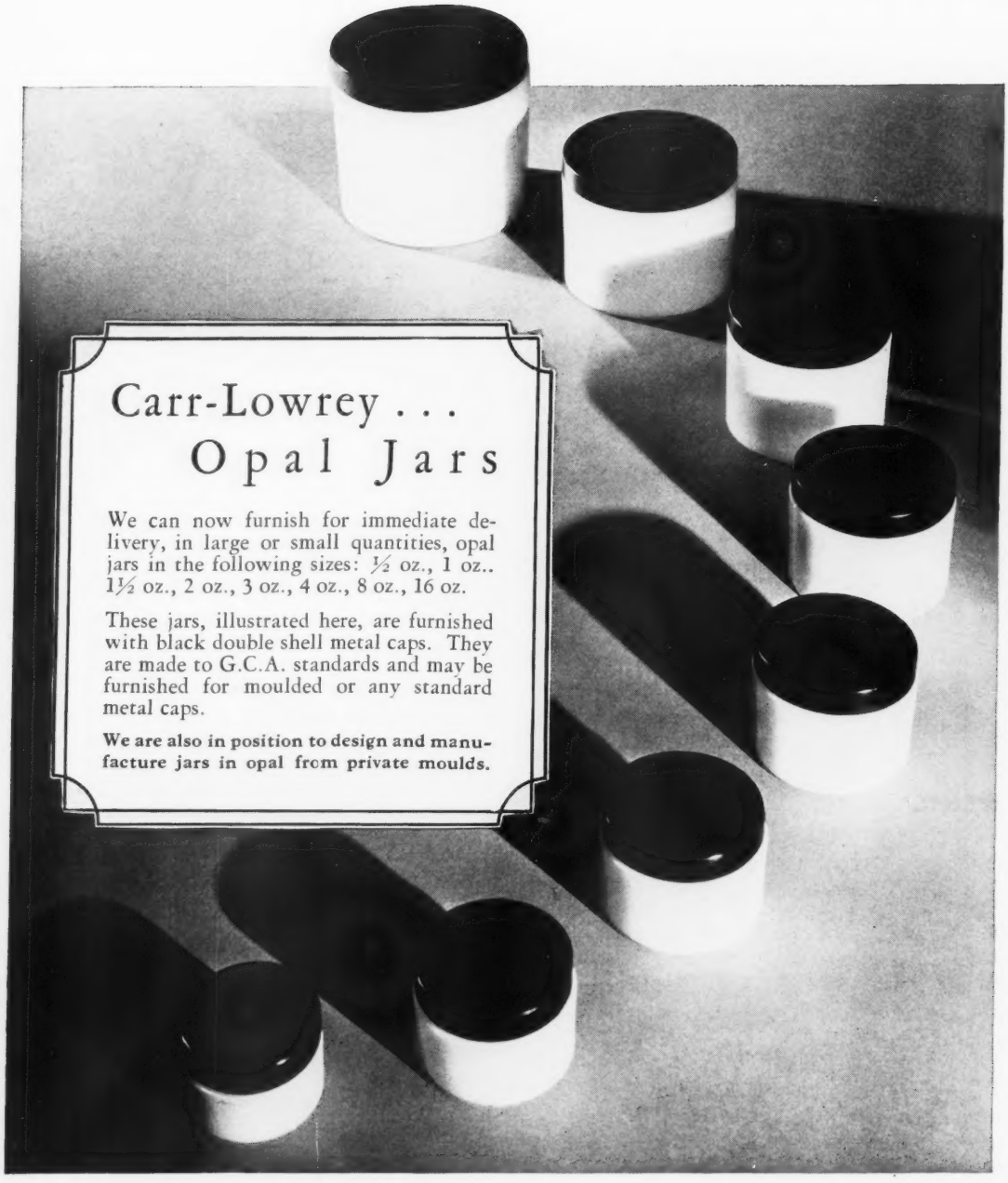
A recapitulation of what has been done with plastics in cosmetic packaging in America will help point the way to what could be done. Plastics were introduced to the packaging world by that lowly little gadget, the collapsible tube cap, a half-dozen years ago, despite the usual protests of the conservatives. They cost more than scrap-tin caps, but were nicer to handle and rarely cross-threaded. Bottle and jar caps of plastics followed as a natural development.

In the meantime, plastic fractional-ounce rouge boxes with threaded covers appeared in increasing numbers. This was a natural development for smooth finishes were required inside and out, and the use of plastics for rouge containers presented no difficulties. Today, at least three of the molders have stock molds for rouge boxes and among those who have used the plastic boxes are Colgate, Park & Tilford, Vantine,



For the lipstick shapes, moldings permit innumerable diversities of design, few of which have thus far been explored. (Photographs courtesy Beetleware Corp.)

*President, Beetleware Corp.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We can now furnish for immediate delivery, in large or small quantities, opal jars in the following sizes: ½ oz., 1 oz.. 1½ oz., 2 oz., 3 oz., 4 oz., 8 oz., 16 oz.
These jars, illustrated here, are furnished with black double shell metal caps. They are made to G.C.A. standards and may be furnished for moulded or any standard metal caps.
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Package by Stokes & Smith

The Baking Soda Package shown above is automatically filled and constructed on two Stokes & Smith machines at a production speed of sixty packages per minute.

A Stokes & Smith Neverstop Automatic Carton Filler and Sealer feeds the cartons, bottom seals them, fills them and top seals them. They are then carried by conveyor into an S & S Automatic Tight-Wrapper which automatically tight-wraps the filled cartons with printed labels and delivers them to shipping containers.

This installation is readily changeable for 8 oz., 10 oz., and 16 oz. packages. The production cost is surprisingly low.

This is but one of hundreds of Stokes & Smith installations. Stokes & Smith engineers probably have an easy answer to *your* packaging problems. Write and ask them.

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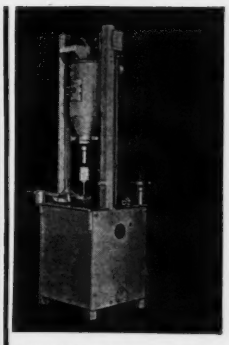


UNIVERSAL FILLER

For any powder, granular product or paste. Fills by gross weight, volumetric measurement or packing. Speed: 15-30 units per minute.

CONVEYOR NET WEIGHT SCALE

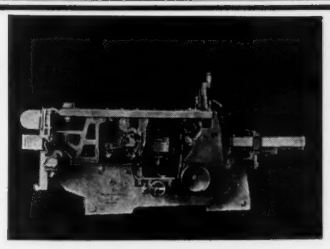
For nuts in shell, hard candies, flaked products, etc. Fills by net weight. Speed: 15-25 units per minute.

VOLUMETRIC FILLER

For salted and shelled nuts, tea, whole spices, flaked cereals, etc. Fills by volumetric measurement. Speed: 20-30 units per minute.

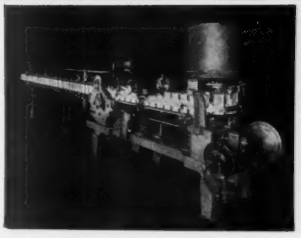
AUTOMATIC TIGHT-WRAPPER

For all food and grocery products. Automatically tight-wraps carton with printed label. Speed: 60-70 units per minute.



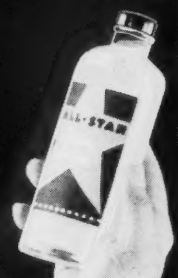
NEVERSTOP FILLER & SEALER

For all grocery products in cartons. Feeds cartons, bottom seals, fills, top seals. Speed: 40-75 units per minute.



ARE YOU "that outfit"?

"That outfit has certainly gone to town since they put their product in an attractive looking bottle and brought the package up-to-date . . ."



How about stock-mold containers like these?

Picture your product in a more salable package

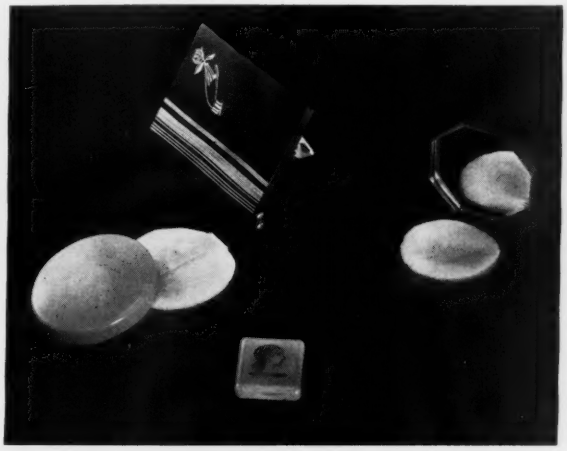
● An "old-timer" package may not *seem* to be a sales obstacle to the manufacturer who has been using it for a long time. But just let him change to a modern package—he'll immediately realize the important sales advantage he has been missing. In the *Onized* line of smartly-designed stock-mold glass containers, you will find the container your product needs to gain *new appeal . . . new friends . . . increased sales.* Write for samples and full information. Owens-Illinois Glass Company, Toledo, Ohio.

OWENS-ILLINOIS

Luxor and a host of others. Plastic rouge boxes offer not only variations of color and color combinations of the two parts, but may also be ornamented with indented lettering into which ink may be rubbed or with inserts of bright metal giving a handsome inlay effect. These boxes are inexpensive enough for the ten cent store trade and have been so extensively used that they must now be regarded as standard cosmetic packages.

Molded lipstick and molded compact cases have also been used, but thus far they are rather rare, but there seems to be but one stock mold for a compact case available for these products. "Perstick" and Tussy have made what is probably the outstanding use of plastics in lipstick-type cases and these, of course, are private molds. McKesson & Robbins and Terri have used plastic compacts with metal covers.

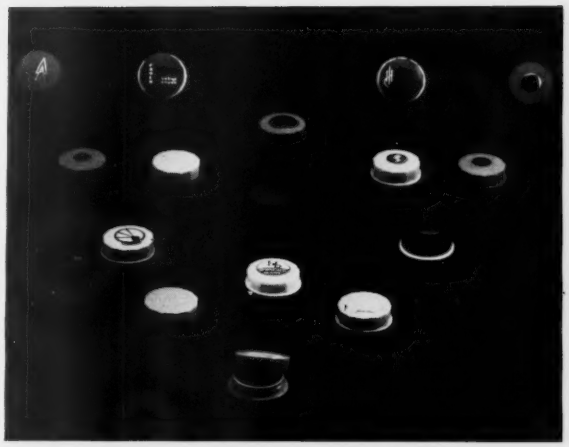
With the Coty powder box as an outstanding example of what can be done, it seems surprising that more



For compacts, molded containers offer novelty of color and character. (Photograph courtesy Beetleware Corp.)

manufacturers have not adopted a molded powder box. Molded boxes are perfectly feasible although priced higher than the paper boxes in widespread use today. They could be made sift-proof and with the usual peephole and would have the sleekness, color and contrast peculiar to plastics. Tops could be engraved and trademarked with wiped-in pigments. To be sure, initial investments are required: several hundred dollars for designs and another similar outlay for a trial mold for consumer tests, but when approached sanely, the investment would pay the same dividends as similar advertising investments now pay. Another approach would be for some cosmetic manufacturer to issue at an extra price a molded de luxe container that would ornament any boudoir and sell paper packages to fit as re-fills.

Although there are numerous stock molds for plastic cream jars in all of the popular sizes available and al-



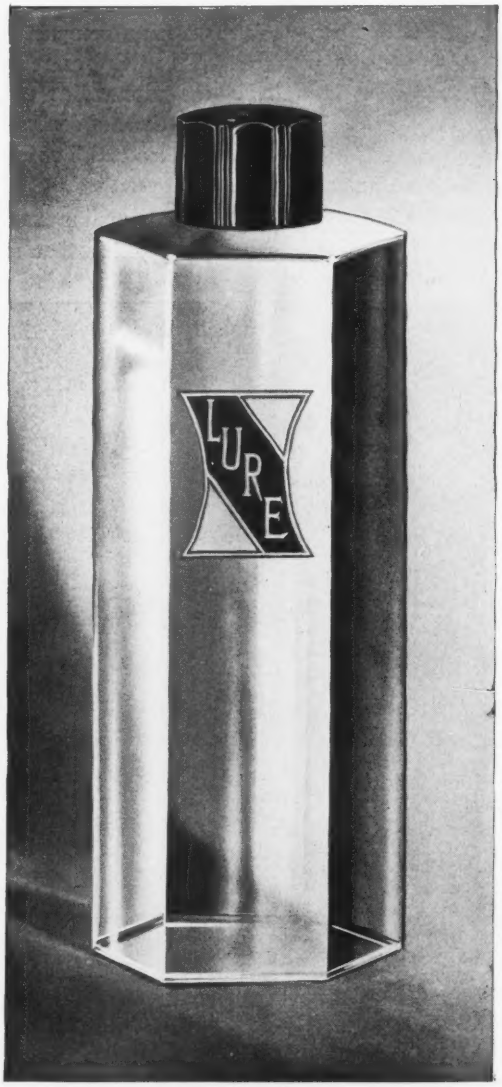
Stock molds of several shapes provide molded rouge boxes in all colors, with chromium inlays or wiped-in grooved letterings.

though several manufacturers have used them with complete success, no major manufacturer has yet taken the plunge and adopted a plastic cream container. One of the problems in the use of plastic cold cream jars is to make them look as large as the corresponding items in glass. A plastic 2 oz. jar is markedly smaller in apparent size than a glass jar. The fear of manufacturers that the public will think that the plastic jar contains less cold cream for the money is a major difficulty in inducing the cream manufacturer to pioneer. The ideal molded container would be one made as small and light as possible to carry the contents, which would save money on freight, breakage and packing and material, and the problem is to teach the public to appreciate the fact that 2 ounces of cream is 2 ounces, whether it looks like more or not. The plastic jar may be used with confidence for all creams except those with more than 50 per cent water and, with the variety of stock molds now available, the cream manufacturer is enabled to make a very inexpensive test of their sales possibilities for his product.

Molded jars have no limitation of color, few limitations of shape, a restriction against use with creams carrying over 50 per cent water and the main difficulty is that they do not look as big as glass jars.

SWINDELL GLASSWARE

In the
modern mode



4-oz. No. A-539

This smart new bottle, machine made, is typical of the attractive glassware produced by SWINDELL for over sixty years. Hexagonal in shape, the sharp lines are in pleasing contrast with the round cap. It is now stocked in 4-ounce size. Other sizes soon available.

In both the machine-made and hand-made SWINDELL bottles, you will find a rare combination of beautiful design and real utility.

Boston
Ernest Whitehouse
40 Court St.

Los Angeles
Baldwin & Baldwin
819 Santee St.

SWINDELL BROTHERS
INCORPORATED
BALTIMORE . . MARYLAND
New York Office 200 Fifth Avenue
ESTABLISHED 1873

Havana, Cuba
Roberto Ortiz
Edificio Moenck
& Quintana 209

Chicago
James T. Johnson
1257 W. 97th Place

Packaging Notes

(*Continued from page 609*)

that they have just about solved their production problem. We've seen some very gorgeous paper tubes with splendid color and design effects which may be ready for market in the near future.

While we're on the subject of tubes, the people who are molding them out of celluloid appear to have something very nice in those new tubes which puff out powders in a fine spray when the sides of the tube are pressed. It's a natural for a deodorant powder.

A New Face Powder Drum

The sins of the average face powder drum are too well known to need much recounting here. The powder spills when the drum is first opened, usually comes out in a cloud every time thereafter when the box lid is removed, and can almost always be counted upon to sift out over milady's clothes when she is travelling.

Mr. Stanley Lowen of New York claims that the accompanying drum will solve all these customary evils and make the consumer your friend for life. As the picture of the model indicates, it is a bellows-type drum, attached to a solid top in which is set a sifter. Open the sifter, tap the powder puff against it, and the powder is blown out on to the puff. Close the sifter and you remove all danger of spilling. The drum collapses under the slight pressure of the tapping but has an inherent tendency to spring back to normal position when the pressure ceases, according to Mr. Lowen.

Although the model shown is round, the drum could be made in any desired shape. It is Patent $1956991, granted May 1, 1934.

The Latest in "Captive Caps"

The most recent contribution to the "captive cap" school of collapsible tube closures is presented herewith. In this case the only aperture is the one shown on the side of the neck of the tube. The cap slides up and down on this neck but is prevented from coming off by a pin at the end of the neck. This pin does not show but the inventor. Mr. Edward J. Richards of Philadelphia, assures us that it is there. All we know is that we tried to force the cap off and couldn't do it.

Mr. Richards is also authority for the statement that the seal made by this sliding cap is a good one. He says that the method employed in drilling the hole leaves the metal raised around its edge. Thus when the cap is forced on, it presses down this raised aperture and, so to speak, makes a seal to suit itself. This trick takes care of any slight variations which may exist in the size of the cap or the diameter of the neck of the tube.

The inventor adds that the increased cost is very small, that the device can be worked with one hand, and that the patent number is 1949219.

Now, if our former experience with featuring unlosable tube caps is any criterion, about 137 readers will write in to tell us what is wrong with it. Which is O. K. with us and we don't doubt that Mr. Richards will be glad to have the criticisms.

Suggested Packages

(*Continued from page 611*)

graph of this sort in its broadest sense, are the simplest and yet most efficient, because most direct and most dramatic devices for display and description, because they attract immediate attention and interest to a greater degree than any other medium of design.

If a further decorative note were considered necessary, it might well be placed on the closure, either in the form of trade-mark, company name or product name.

Insect Repellent: Photograph printed black and white, dark green glass, black cap. Copy in reverse plate on photograph, trade-mark reverse plate on cap.

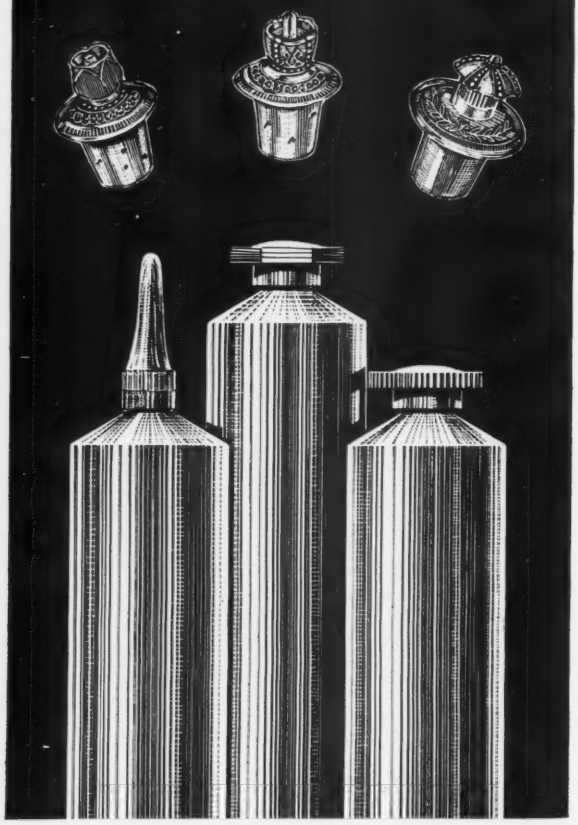
Any liquid remedy that is applied to certain spots of the body, should, for convenience sake, be presented with an applicator. This holds particularly true of an "athlete's foot" solution which is so widely used in the summer time and, at that, not always on premises, where cotton, gauze or other kinds of common application materials are at hand. We have devised a package which, in addition to having a glass-and-sponge applicator, has another feature that should improve the practicability and the balance of a bottle: a cardboard container that envelops the bottle at its lower end and which, in addition to carrying the necessary copy, will protect and dress-up the package. The open panels are provided for enabling the user to see both the applicator and how much solution there is left in the bottle. A container of this sort would have the additional value of eliminating extra packing for the manufacturer, since a number of these bottles could be packed directly into the usual shipping carton, and of saving extra handling to the druggist and the consumer, since it is all ready to use as it leaves the shipping carton or the store.

This ensemble, as the photograph indicates, makes an obvious appeal to the consumer, both in its convenience and in its attractive simplicity of appearance.

"Athlete's Foot" Remedy: White glass with black screw top holding applicator. Cardboard black and white. Brown, blue or green could also be used to good effect, especially, if the glass of the bottle is in one of those colors.

COLLAPSIBLE TUBES
& BOTTLE SPRINKLER TOPS

Our experience of more than fifty years in designing and manufacturing the collapsible tubes used for many famous products is at your service. We cordially invite you to consult with us on your tube problems. Your inquiries will be given sympathetic consideration.



WHITE METAL MFG. CO.
HOBOKEN NEW JERSEY

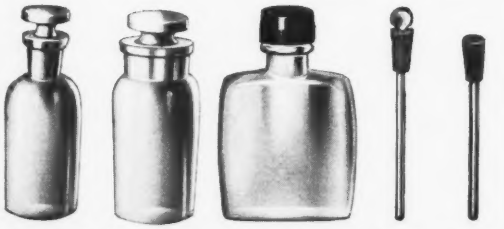
New York Office:	Chicago Office:	Detroit Office:
F. L. Butz	Charles A. Rindell, Inc.	R. M. Stevenson
393 Seventh Ave.	64 West Randolph St.	506 Donovan Bldg.

NEW items in the **GLASS PRODUCTS LINE**

Package No. 14 for Polish Remover ⅛ oz.
Package No. 13 for Perfume ⅛ oz.
Package No. 11 for Nail Polish ⅛ oz.
Package No. 19 for perfume
Package No. 18 for perfume ¼ oz.

Fine quality, attractive designs and wide variety of sizes are features of our bottles, rods, caps and other products for perfumers. Send for price list.

GLASS PRODUCTS CO.
VINELAND, N. J.



Package No. 60 Mushroom stopper, narrow mouth ½ to 32 oz.
Package No. 70 Mushroom stopper, wide mouth ½ to 32 oz.
Package No. 50 for Inhalants ½ oz
Package No. 15 "Penny Head" Rod
Package No. 16 Plain Rod

· FINE CORKS ·

· · · for every bottling need.

Accurately cut from new live corkwood and carefully graded

Write for samples and prices

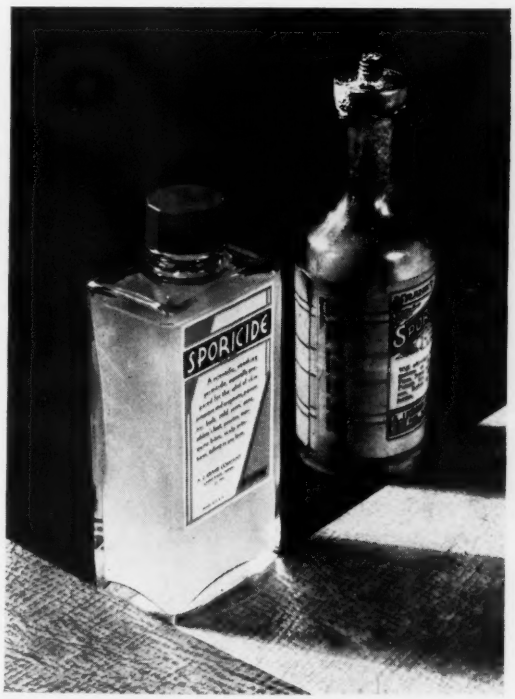
Arco Crown Cork & Cap Co. INC
21 SPRUCE STREET, NEW YORK
FACTORY 3903-5 SECOND AVE., BROOKLYN, N.Y.

KATHLEEN MARY QUINLAN "Freshen Up Kit" is effected in white with silver trimmings. Fitted into pockets are the "Mist of Dawn" powder, liquid finishing cream, make-up lotion, skin stimulant, double strength astringent, liquid cleanser and skin youthifying cream. This kit is designed primarily for treatment of the oily skin.

A NEW TOILET WATER, "Eau de Toilette," by Gabilla is presented in four odors, gardenia, violette, sweet pea, and jasmin. The attractive modernistic flacons come in two sizes. Another product uniquely packaged in a grained wooden drum is a water softener and bath oil. It will soften the hardest water and at the same time yields a soothing and revitalizing oil. It is scented with gardenia, violette, sweet pea, jasmin or eau de Cologne.

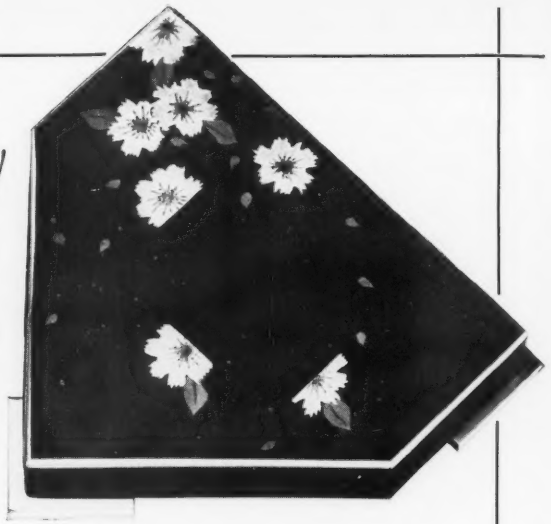
THE STRIKINGLY STRIPED YELLOW and black rubber lined beach kit by Primrose House is finished with zipper fastening and matching loop handle. The kit contains a box of Primrose Tan Powder, a jar of the new "Delv" cream, beach oil and lipstick.

A. J. KRANK & Company have redesigned the container for their Sporicide in keeping with the modern trend. Smooth modern lines to the bottle, a molded screw cap for greater convenience and better appearance, and a different label complete the change. Photo, courtesy of General Plastics.



Individuality is half the battle!

An effective presentation in merchandising a product is more than half the battle in selling. ¶We have exceptional facilities for producing boxes of this character. If your product requires a more attractive setting to help dealers clinch sales, tell us about it and we will make up a sample container for your approval.



Created by Young Brothers, Inc.

YOUNG BROTHERS, INC.

"Makers of Boxes for Over Fifty Years"

FACTORY:
722 EDDY STREET,
PROVIDENCE, R. I.

GUTMANN'S C.T. SCREW CAPS AND "FILMA-SEAL"
(the double seal of cap and film)

Prevents Leakage and Evaporation
Is a GUARD against COUNTERFEITING
Cap may be printed with a warning to purchaser not to accept if inner seal is broken or tampered with.
Used on many Nationally known advertised products

FERDINAND GUTMANN & CO.
BROOKLYN, N. Y.
Established 1890
U. S. Patent & Pats. Pending—Trade Marks Reg.

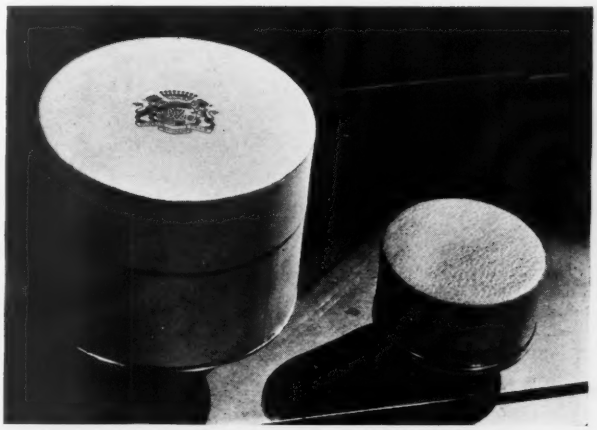
BOTTLES and JARS

- A full line of bottles and jars always in stock for immediate delivery.
- Available in small or large quantities. Jars: Clear, Opal or Colored, in all standard sizes—any quantity from stock.
- Perfume bottles, standard moulds or special design.
- Lotion bottles—many very attractive designs for your immediate use.
- Bottles and jars with and without caps. Let us quote on any size order for any type of bottle or jar.

HAGERTY BROS. & CO.
10 PLATT ST., NEW YORK CITY

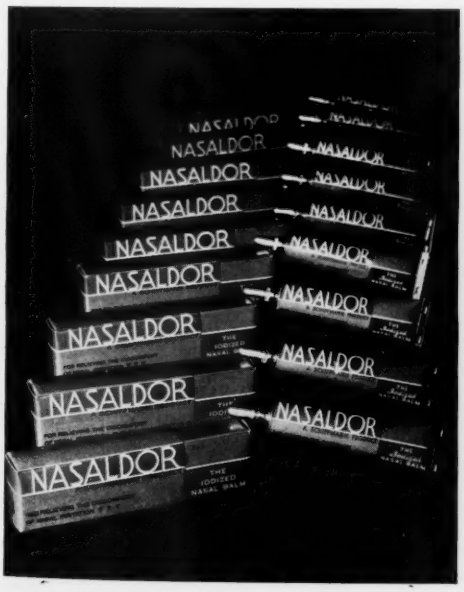
MELSHEIMER LABORATORIES, Rutherford,N.J., has introduced the first two items of its line. They are "Tan-Glo," a sun screen, and "Romelo," a latherless shaving cream. The former is said to give protection against deep burning while the latter is non-greasy and leaves the skin relaxed and soft. Representation has thus far been secured in New Jersey and Long Island, and in portions of New York and Pennsylvania.

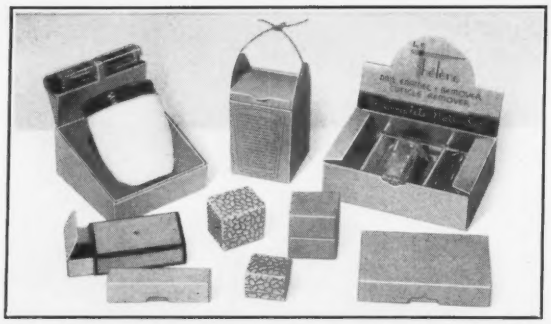
DUSTING AND FACE powders in two colors, "Le Dandy" and "Gardenia," have been added to the line of D'Orsay products. The face powder is packaged in a simulated pigskin box with silver tone metal band at base. A gray box with blue trimmings and the coat of arms in blue on cover has been chosen for the dusting powder.



THE CHARLES of the Ritz new treatment kit, developed in a white box with rose base contains a jar of Velvet texture cream, skin bloom, massage cream and skin tonic. All of these are packaged in miniature packages similar to the usual size Charles of the Ritz containers.

NASALDOR, attractively packaged in a red and green carton, is a new product of E. Schiffman Company, Los Angeles.





GREEN BROS. INC

MAKERS OF SMALL PAPER

BOXES

AND

COUNTER DISPLAYS OF ORIGINAL DESIGN

35 VALLEY ST. EAST PROV. R.I.

DEODORANT APPLICATORS

These attractive and practical applicators may be obtained with or without bottles to suit your particular requirements. Made by a special process, the rubber sponge dauber will not ride up the rod or pull off the end. The rod itself will not pull out of the cap.

In addition to deodorants, these applicators may be used to apply liquid depilatories, cuticle removers, "athlete's foot" remedies, liquid adhesives and shoe dressings and a variety of other liquid preparations.

We have had over 10 years experience in devising various types of applicators and closures and will be glad to apply this knowledge in solving your specific problems.

Send us the bottle you are using—or would like to use—and let us equip it with an applicator to fit. No obligation.

A. C. JAMES & CO., Inc.

99 HUDSON STREET NEW YORK, N.Y.

RIEGELINE

FOR

TRANSPARENCY

WITHOUT EXPENSE

Riegeline is a newly developed product, combining the economy of ordinary glassine with the transparency of more expensive wraps. It twists well, works rapidly on any wrapping machine, and will not expand in wet weather or shrink to the splitting stage in dry weather.

LIBERAL SAMPLES AND PRICES PROMPTLY FURNISHED

RIEGEL PAPER CORP.

342 Madison Avenue · New York

NATIONAL

COLLAPSIBLE TUBES

Yours to Command

Ask us to submit designs and suggestions for the right type and style of collapsible tube to suit your product. Our product is known for uniform high quality—our organization for *personalized* service.

Ask us to submit designs, samples, ideas. We will gladly send catalog.

NATIONAL COLLAPSIBLE TUBE CO.

PROVIDENCE, R. I.

New York Office: 331 Madison Ave., Phone Murray Hill 2-0339

Pacific Coast Office: 6370 Franklin Ave., Hollywood, California

OUTDOOR GIRL chain store packages have rich cerise labels on the special mold containers. Labels are matched by cerise molded caps. Photo, courtesy of General Plastics.

ASTRINGOSOL is shown in a before and after effect. Elimination of the long bottle neck and a molded cap are outstanding features of the modernization. Photo, courtesy of General Plastics.

DE KAMA CO., Beverly Hills, Calif., has introduced a new item to its line, "De-Kar-Mone," which is priced at $35.00 per jar. Other members of this line of hormone facial preparations are "Creme Hormonique" and "Creme Vi-Tavo."

38 PERIWINKLES and Therefore are odors of the smart New York dress designer, Elizabeth Hawes. The mark of her profession is unmistakably impressed upon the woman who handles her most unique packages.

A NEW CREAM by Cosmetiques Tussy, "Anti-Sunburn Foundation Cream," does just what its name implies; acts as a foundation for make-up and prevents the skin from burning. The cream itself is a lovely peach beige color and possesses an appealing floral odor.

PACK-URGES*

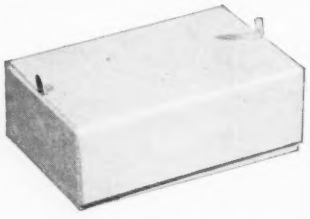
by "Duff" Gordon

"CAPLESS TUBE" PROVEN SUCCESS AFTER A YEAR'S TRIAL!

Just a little over a year ago Pack-Urges featured a "Capless" tube, suggesting it as the ideal container for tooth pastes, creams, and pastes—by virtue of its eliminating for all time the "lost" tube cap problem—or the costly item of leakage on shipments for foreign climes. Much publicity resulted—and a tooth paste that adopted the new closure reported "success" from the outset.—Now—more than a year later—we have tubes which were filled and numbered for later tests—others in use for twelve months—and these samples prove beyond question that the "Capless" tube overcomes many bothersome questions; is economical to manufacture, as it eliminates cap costs; lives up to its guarantee of automatic closure after each time it is used; and gives manufacturers of tooth paste, shaving cream or what have you, an additional advertisable feature for their products. We are predicting a continued success for the "Capless" tube and will send you samples to prove our point. Write us now for costs and proofs of our statements as to its success.

• • •

MAILERS FOR EVERY PURPOSE



The mailing box illustrated here is just one style of the wide range of "Gordon" Mailers, suitable for every type of sampling campaign . . . Some are corrugated lined—others have sealed flaps—all are approved by the United States Postal Service . . . Show us what you want to mail and we'll build a box around it that will deliver your product in perfect condition . . . Prices are moderate . . . Workmanship unexcelled . . . A call will bring you full particulars.

• • •

PERFUME AND POWDER BOXES

Every perfumer knows that boxes for Perfumes, Cosmetics and Toilet Preparations should have a note of individuality *built into the box.* Style trends and interior decorative preferences are but two of the many phases which we keep in mind when making boxes for the cosmetic trade . . . The only set-up box included in the best All American Twelve Packages was handled in detail by us (designed by Mrs. Avery Robinson)—just another example of our ability to interpret your ideas in definite salable boxes. Call us in on your next box purchase . . . We'll serve you right—and save you money.

"Pack-Urges" is issued occasionally in the interests of better packages. If you wish to receive it regularly it will be sent free upon request. Address: ***H. R. M. Gordon*** *—A Complete Packaging Service—****331 Madison Ave****. (Phone Murray Hill 2-0339) New York.*

*Copyright and trade-mark applied for

Colored Jars *and* Bottles..

We color standard opal and flint glass containers for the cosmetic manufacturer. Over 1000 shades and finishes to choose from. Small or large orders filled promptly

DURA-COLORS, INC. 1814 E. 40TH STREET, CLEVELAND, OHIO

Write for samples and prices

Non-rolling extra-depth cap, oil-resistant rubber parts, SAF-TEE Ball Glass.

New Perfection Dropping Parts are Products of years of experience in meeting manufacturer's particular requirements. Bakelite caps or rubber parts obtainable in any color desired. Write for samples and quotations.

PENNSYLVANIA GLASS PRODUCTS COMPANY

410 No. Craig St. Pittsburgh, Pa.

NEW PERFECTION

"The Part that Gives Your Product Prestige"

LABELS

ENGRAVED AND EMBOSSED

Faithful Service Since 1881

JOHN HORN

837 Tenth Ave. New York

"A Product is no better than its container"

Gone are the days that a path is beaten to the door of the man who simply makes a better mousetrap—or an improved cosmetic. With today's competitive market the American Public has become package conscious. A product must be attractively and practically packaged to gain consumer acceptance.

Sheffield Processed Tubes, attractively designed and sturdily made, are a definite sales asset and, surprisingly enough, cost no more than mediocre tubes.

Write for information and estimates

NEW ENGLAND COLLAPSIBLE TUBE CO.

New York 500 Fifth Ave. | New London Conn. | Chicago 3132 S. Canal St.

PROVED by EXPERIENCE

(Satisfy yourself) ⟶

This LOW-PRICED CAPPER *SLASHES costs!*

THE LUDCKE COMPANY
230 California St., Newton, Mass.

Please send further information on your HERNDON CAPPER. No obligation, of course.

Name.....

Firm Name.....

Street.....

City.....State.....

We cap approximately..... containers per day.

THE HERNDON CAPPER

HANDLES ANY CAP THAT TURNS

Ten Outstanding Advantages

1. *Original cost only one-tenth to one-fourth that of full- automatic capping machines.*
2. Caps up to 100 containers per minute.
3. Unskilled girls do the whole job. No mechanical training or supervision required.
4. Caps any container of any height, shape or size, either glass or metal . . . *from the tiniest perfume vial to the wide-mouthed cold cream jar!*
5. Adjustable, in 35 seconds, to any new run of containers or closures . . . by the operator herself!
6. Handles all closures . . . round or octagonal, shallow or deep, metal or molded. *Guaranteed not to mar or crush enameled, lacquered or highly finished plastics.*
7. Turns every cap to *uniform, pre-determined tightness* . . . and leaves it removable by hand!
8. Provides uniform, sanitary, air-tight and leak-proof sealing.
9. Portable, easy to handle . . . *and guaranteed free from repairs for one year.*
10. Plugs into any electric socket . . . *and operates at a cost of a few cents an hour!*

If you turn out small or varying lots of screw-capped drugs or cosmetics, THE HERNDON CAPPER will cut your costs. Hand-capping positively cannot compete with this low-priced, labor-saving capper. It costs little to own . . . little to operate!

It actually *does the work of full-automatic capping machines four to ten times as costly!* One American manufacturer caps *over 400,000 containers per week with only three* HERNDON CAPPERS.

Even with full-automatic machines in your plant, one or more HERNDON CAPPERS will save time and money on smaller runs of a variety of products ordinarily capped by hand because of the time and labor wasted in stoppage and adjustment of automatic machines.

For information on how THE HERNDON CAPPER will cut your production costs, mail the above coupon *today.*

THE HERNDON CAPPER
SOLD EXCLUSIVELY BY
THE LUDCKE COMPANY
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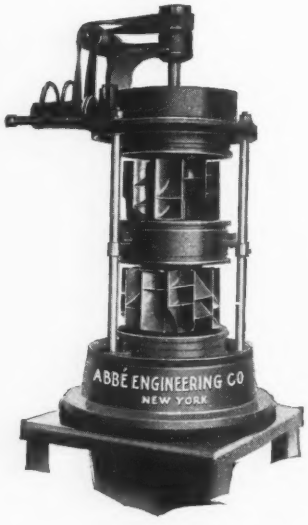
•IT HANDLES ANY CAP THAT TURNS•

MODERN MACHINES *for* MODERN FACE POWDERS



BLENDING

ABBE pebble mills are unexcelled for the thoroughness with which they perform the milling operation. Through the use of this machine your face powder is assured a smooth and luxurious texture and a perfect blending of color. It makes for economy in that it develops the full strength of the color used, thus permitting the use of smaller quantities of color to secure a given shade in any batch of powder. (The pebble mill is unsurpassed for drug milling, too.)

ECONOMICAL SIFTING

For small batches of powder, the performance of this compact, fast, inexpensive Blutergess Midget Turbine Sifter is particularly impressive. It will sift your powder to 300 mesh at a rate of 30 pounds per hour and up. Lowest operating and maintenance cost of any powder sifter on the market. Excellent for laboratory use and for smaller manufacturers. Priced low enough to enable you to use one for each shade—thus saving cleaning.

HIGH-SPEED SIFTING

The ABBE Blutergess Turbine Sifter is the most efficient, high-speed sifter ever invented. It sifts powders to 300 mesh at a rate of 500 pounds per hour and up. Easy to clean, low operating cost, dustless operation. Silk or wire cloth may be used.

WRITE FOR FREE BOOKLET AND PRICES

We have recently published a new booklet, Bulletin 35, of interest to all drug and cosmetic manufacturers. A copy will be forwarded free of charge upon request.

ABBE ENGINEERING CO.

COrtlandt 7-1115

56 CHURCH ST., NEW YORK

Mills, Mixers, Sifters, Grinders, Pumps, Vacuum Equipment for Drug and Cosmetic Manufacturing

BOSTON BUFFALO BALTIMORE CHICAGO AKRON LOUISVILLE LOS ANGELES CLEVELAND MONTREAL TORONTO

PRODUCTION FORUM

By Francis Chilson
Production Engineer

Cooling Creams and Ointments

Cooling is one of the knottiest problems the trade has to face, especially at this time of the year when it is hotter than Hades. Many of us have worked on cooling and refrigerating systems. Some of us have had pretty fair success, others not so much. Some time ago we reported on a method of water cooling which we developed but found rather sloppy and hard to control in practice. Recently, however, we had to lick a syrup cooling job and the experience thus gained can be used to profitable advantage in cooling heavier materials. We were obliged to cool 300 gallons of syrup from 212°F to 100°F in one hour. The job did not warrant the installation of expensive refrigerating equipment and our own temperature went up above 212°F. trying to figure the damned thing out. We had horried dreams about b. t. U'S. But we finally licked the job through the use of a York surface cooler with ordinary city water. This cooler consists of a series of long copper pipes suitably plated and set one above the other. It has a distributing or loading trough and a discharge trough. The hot material is pumped into the distributing trough or into a tank above it, and the material spreads out and flows down uniformly over the coils. City water enters the copper coils at the bottom and flows upward through the copper pipes and into the sewer from the top pipe. This provides counter-current cooling because the hot syrup strikes the cooling pipes at the point where the water is hottest, and the syrup then comes into contact with colder pipes as it progresses downward toward the discharge trough. The unit is inexpensive and requires fifteen gallons of city water per minute at a maximum temperature of 86°F. which is hotter than city water usually gets. It is obvious that we can do the job better when the water is cooler, but we had to provide for midsummer conditions.

It is obvious that this type of cooler can be used not only for all types of hot liquids but also for creams and ointments. Using city water in counter-current fashion, one could take the heat out of creams and ointments very quickly without causing them to separate and without causing crystallization. One could either bring the creams down to filling temperature or bring them all the way down to the congealing point. Since the creams in the latter case would congeal, it would be necessary to scrape the pipes or provide a traveling scraper which would not be very hard to design.

As a matter of fact the outfit which builds these coolers would do that for you. Incidentally these coolers can be arranged so that refrigerants can be circulated through the lower coils and city water through the upper.

Another thought which suggests itself which would take care of the scraping problem is to use three revolving rolls fitted with scrapers and arranged one above the other. Refrigerated brine could be passed through the lower one, city water through the middle one and the warm water exhausted from the middle one could be passed through the top one. This would provide gradual cooling and the scrapers could be arranged so that the material would be scraped off the upper rolls in such a manner that it would fall on the lower ones.

Most of you have cooling problems of one kind or another and if you'll drop us a line we'll put you into touch with the company that built the syrup cooler for us.

Extracting and Concentrating

We had lunch the other day with one of the boys who is very keen on using a pebble mill for drug extraction. During the interchange of ideas on the subject it developed that a vacuum pebble or ball mill might also be used as a concentrating still so that this one unit could be used for grinding, extraction, solvent recovery and concentration—and also if necessary as a rectifying unit to bring up low alcohol. This is how we doped it out: The unground crude drugs should be dumped into the mill. Very large roots would of course have to be run through a rotary cutter so that the pebbles could get hold of them. The mill would be sealed and the alcohol pumped in. The mill would be started and the drug ground in the menstruum. In order to hasten the process a vacuum would be drawn on the mill and immediately vented in order to impregnate the drug with the menstruum. In due time the extract could be drawn off to a collection tank and, after successive washes had been run through likewise, steam could be run into the jacket and a vacuum again drawn on the mill to recover the solvent. With this operation finished the exhausted marc could be discharged, after which the pebbles would be dumped and washed with a hose. Then large balls, a few dozen or so, made of metal would be put in and the extract pumped back into the mill. Again a vacuum would be drawn and steam run into the jacket, and this would be maintained until the extract was reduced to dryness. The large balls would be used for grinding the dry extract and to keep it from sticking to the inner wall of the mill. Although the theory presents some practical difficulties we'd like to try it and, as a matter of fact, we have arranged with the Abbe Engineering Company to run some experiments in their laboratory. The set-up above would require the following units of equipment. A rotary cutter, a steam jacketed pebble mill, a condenser, a vacuum pump and two or three extract tanks. Quite a number of manufacturers are abandoning old methods of extraction and concentration and it is our opinion that the trade will make more innovations in this field in the next two years than it has in the past century.

Dry Mixer

Charles Ross and Son, 83 Emerson Place, Bklyn, N. Y. have introduced a turbine mixer for powders such as face powder. This mixer consists of a cylinder which holds the charge. In the bottom there is a high speed disc turbine which throws the powder against the wall where it piles up until it breaks down and tumbles in upon the rotating disc again. With this machine it is possible to obtain a very rapid mix. It is suggested as a pre-mixer for face powder to speed up the output of a pebble mill or as a preparatory mixer for use in connection with high speed pulverizers. It is also suggested as a unit for blending crude drugs prior to extraction.

Air Filtering

Air filters cost such a small sum that we're sure the time is not far off when no plant will be without them. Many types are available: glass wool made by Owens-Illinois, felt, paper, oil, and cotton and fibre. The fibre types are similar to Kimpack. As a matter of fact all you need to

KARL KIEFER

Filling Equipment
for Liquids and Semi-Fluids

WITH Kiefer Filling Machines, there's hair-trigger accuracy . . . no waste . . . no spills . . . every bottle, can or jar filled clean as a whistle . . . just the exact amount.

From the simple hand-operated machines to full automatics there's a Kiefer for you. It will do the work better and permit economical operation.

Photo shows the famous Kiefer full automatic Bottle Blower with feed and discharge conveyor, Kiefer Automatic Rotary Vacuum Filling Machine, and Capping Machine with a production capacity of 100 or more bottles per minute and only one operator to supervise production.

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Sales Representative Pacific Coast: P. Jorgensen, 311 California Street, San Francisco

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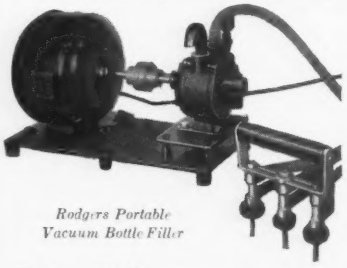
For Speedy, Efficient Liquid Handling



Rodgers Portable Vacuum Bottle Filler

Portable Vacuum Bottle Fillers,
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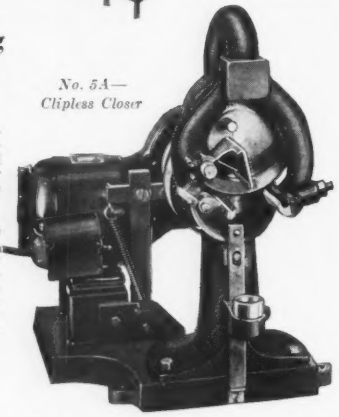
No. 5A— Clipless Closer



Write for catalog describing our economical line of hand and motor driven tube or jar filling and tube closing equipment.

We also manufacture hand operated and motor driven Powder Filling Machines, Glass-Lined Tanks, Conveyors, Pony Mixers & Ointment Mills, Rotary and Centrifugal Pumps (Iron or Bronze).

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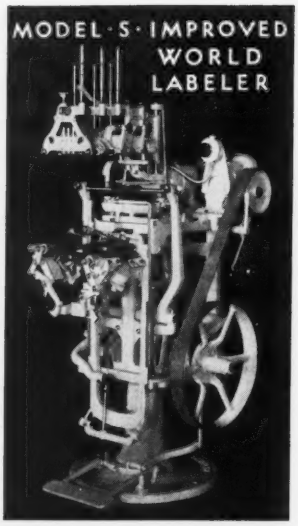


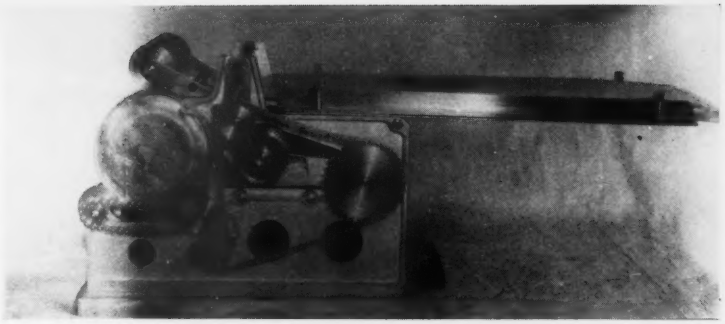
The most flexible labeling machine. Easily equipped for labeling any size bottle or jar. Many exclusive mechanical features, developed by manufacturing experience of more than 35 years.

Economic Machinery Company

WORCESTER, MASS.

Makers of Complete line of automatic and semi-automatic labelers.

make an air filter is an intake-fan and a frame to hold Kimpack or glass wool which you can get from Kimberly Clark and Owens-Illinois. Of course for permanent service more durable and more efficient installations are required. To secure good results from air filters it is necessary to seal all windows so that no outside air can get in excepting through the fans. It is also necessary to provide heating coils to temper the incoming air during the winter. Air filters can be used for inside work, too, such as dust arresting during grinding and milling operations.



HAND LABELING MACHINE

Hand Labeler

A couple of years ago we described in this department a small hand labeling machine made by J. J. Aylesworth, 115 Charles Street, New York City, but somehow or other we couldn't get hold of a photograph. The machine you see in an adjacent column is it. The unit is about as big as an adding machine and is designed for round containers only. The container is placed on the rolls and the labels are fed from a stack at the side. A single turn of the handle and the job is done. The machine requires no skill and one operator can turn out a hell of a lot of labeled packages in a day. The unit, we're told, is good for wrap around labels as well as patch labels. And its inexpensive.

Hand Capper

Here's some dope on a flexible hand capper that really works and is free from the structural defects of the one we described in this department about a year ago.

The Herndon capping machine was first brought on the market in January, 1929 and the first machines installed at that time are in daily use today. During the subsequent four years a great many improvements have been made on the machine until today it represents what we believe to be the most efficient and lowest-price high speed capping device of the portable and semi-automatic type.

The motor is connected with a belt to a driving shaft and sensitive, adjustable clutch and then to a flexible shaft to which the capping chuck is attached. The end of the shaft is threaded so that chucks are inter-changeable and less than one minute is required to change from one size chuck to another.

The chucks, which are machined especially to fit each size cap used, are made of hardened steel of the highest quality obtainable. The inside of the chuck is tapered and finished so that the portion that touches the caps is as smooth as glass. Regardless of how tight it is desired to screw the caps, there is no danger of the chuck marring or crushing the finest metal or molded closure. The chucks are made to handle any cap that turns from that used on a tiny perfume bottle to one fitted for a wide-mouth jar. Because of the very sensitive clutch there is no strain on the threads of the caps or container necks. It provides a perfect, always uniform, airtight seal but still removable by hand.

In using the Herndon capper, the caps are quickly laid on the tops of the containers. The chuck is then brought into contact with the cap and the cap is turned to the desired tightness. When that point has been reached, the chuck ceases to rotate. The chuck is then lifted and placed on the next cap.

The entire capping unit is usually suspended over the work bench or over a conveyor belt by means of a bracket from ceiling or trolley. Pedestal types are furnished when desired. No room is sacrificed and the overhead suspension together with the flexibility of the drive

HAND CAPPER

shaft makes it possible to drive caps on a large number of containers over a large area before they are removed from the racks. The drive shaft and chuck is also supported by a spring which reduces the fatigue in handling the chuck to a minimum and also holds the chuck up and out of the way when not in use.

Although the speed of capping is somewhat dependent upon the size and type of closure used, actual records of the machine operating in a Boston drug plant show incredible speeds.

The Herndon capper is being used successfully in conjunction with automatic filling and automatic labeling machines by suspending the capper over the conveyor belt between the two. Usually such an arrangement is said to permit a production of about 50 to 75 containers per minute.

For manufacturers who package a large variety of products, and many small runs the Herndon is most efficient because the machine can be fitted with the different chucks with no loss of time. It is further unnecessary to make any adjustments for the different sizes and types of bottles, cans or jars. Because the machine weighs less than 50 pounds, it can be moved to various parts of a plant easily and quickly. The machine is sturdily built and *is guaranteed against mechanical and operating defects for one year.* The unit is made by the Ludcke Company, 227 California St., Newton, Mass.

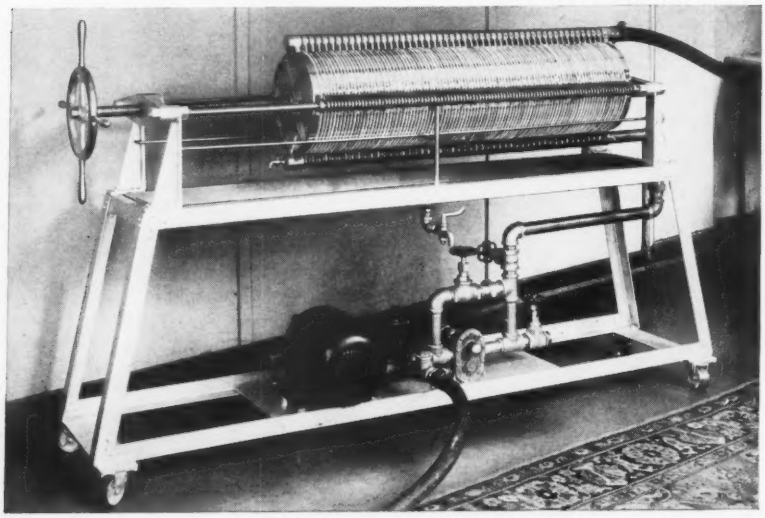
Types of Pumps

We had an interesting inquiry from a correspondent who was somewhat puzzled as to the mechanics of pumping and unable to determine which type of pump was best suited for his purposes. To him a pump was just a pump until he bought one that would not perform the job he had for it and then it occurred to him that the construction of his pump might render it more suitable for one type of work than another. Pumps are so widely used in this trade that we supposed the differences between them to be known to everyone.

The pumps most commonly used in this trade are rotary, gear, centrifugal, vacuum and reciprocating. A few diaphragm pumps are used but this type is comparatively rare. Each type of pump is constructed in accordance with certain mechanical principles and is especially useful for certain work. But before selecting any type of pump it is necessary to know how far the pump must draw the liquid and how high it must be pumped. In other words every pump has a suction or inlet port and also a discharge port. Of course a number of other factors must be considered before the pressure head can be calculated such as number of bends, friction losses etc. Some types of pump have very poor suction and excellent lift or

ERTEL EQUIPMENT

Has Proven Quality! DON'T EXPERIMENT



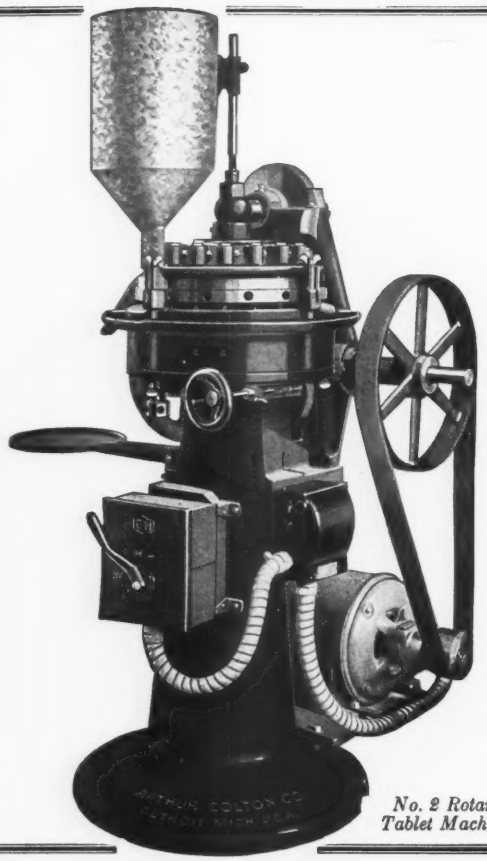
Ertel 100 Disk Filter

Ertel filters are designed by competent engineers and manufactured by skilled workmen. They are machined accurately, are made of only the best materials and are guaranteed against mechanical defects. Built to carry from two disks to one hundred disks they are simple to operate, easy to clean and require no trained operators.

If you have an asbestos disk filter, let us quote you on the Ertel American-Made asbestos filter sheets, which can be cut to fit any filter up to 16½ inches in diameter.

Have you a filtration problem? Send us a sample of your liquid and we will return filtered sample to you for your inspection, at no cost to you.

ERTEL ENGINEERING CORP. 105 EAST 16TH STREET, NEW YORK, N. Y.



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New and Improved!

We have no yearly models—but improvements and refinements are being constantly added to Colton machines.

There are over five hundred Colton Rotaries in use.

Superior design, sturdy construction and ease in operation have made this possible.

The No. 2 Rotary Tablet Machine has such desirable features as *positive pressure*, eliminating varying thicknesses of tablets; *hardened steel gear drive*, eliminating frequent replacement of worms used on other makes, and *sliding upper punch holders*, to hold the punches rigidly, enabling the manufacture of special shaped tablets most satisfactorily.

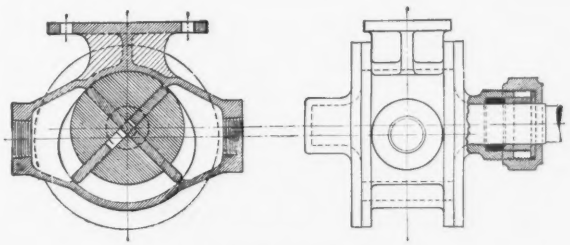
Write for Catalogs.

ARTHUR COLTON COMPANY

2620 East Jefferson Ave.
Detroit, Michigan

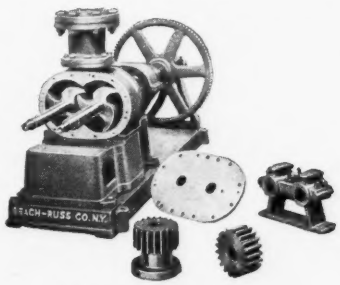
pressure. Others have good lift and poor suction. One type of material is good for liquids containing suspended material such as milk of magnesia; others are better adapted for light liquids; still others are adapted for handling heavy creams and other viscous material.

The rotary pump has excellent suction and very good pressure. When you have either a light or a viscous liquid which must be pulled into the pump for a distance, let us say of ten or fifteen feet and then carried up to the floor above, you can use a rotary to advantage. One of its other advantages is that a rotary delivers a steady uniform stream which does not pulsate as in many other types of pump. In view of the fact that moving internal parts are brought into contact with the cylinder wall, a rotary pump should never be used for abrasive materials of suspensions.



CENTRIFUGAL PUMP

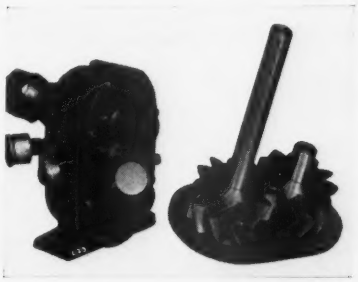
The centrifugal pump on the other hand can be used for suspensions and abrasive materials. In this type of pump the liquid enters a port at right angles to the discharge port through which it is thrown by a high speed impellor. This type of pump has no suction. It must be fed by gravity directly from the supply tank. Neither can it lift the stream very high. Such a pump is useful for abrasive materials as stated, because of its lack of contacting parts, and for transfer work on the same level.



DOUBLE ACTION PUMP

The gear pump, though it is a poor suction pump and should be fed by gravity from a main source, is an excellent pressure pump capable of very high lifts. Hence when you have mineral or cod liver oil to pump from the basement to the top floor several stories above, the job is made to order for a gear pump. It is somewhat noisier than a rotary and less expensive but it will handle creams and ointments as well as light liquids. As a matter of fact one of the best cream fillers on the market is equipped with gear pumps. This type of pump consists of two meshed gears around which the liquid is forced. Hence it is not suitable for suspensions and abrasive materials. A variation of this type is the double-impellor pump which is a cross between a centrifugal pump and a gear pump and is designed for very heavy materials and sludges.

The reciprocating pump operates by means of a reciprocating piston and hence is a pulsating type. It has no suction to speak of but is capable of extremely high pressures. This is the type of pump you find on air compressors. It is not good for abrasive or heavy liquids.



GEAR PUMP

The vacuum pump is usually either a rotary or a reciprocating pump not any different in construction from those described above. Vacuum pumps are very useful for transfer work. Probably there are more vacuum pumps than any other type used in this trade owing to their general use on vacuum filling machines, vacuum stills, dryers, etc. We wouldn't want to hazard a guess as to which is the best type of vacuum pump but until somebody proves we're wrong we'll stick to the rotary types.

This brief discussion outlines only a few common principles. Unfortunately no general rule can be applied to the selection of a pump. All factors such as nature of material, viscosity, etc., suction pull, pressure lift, number of bends and elbows, must all be considered.

Insulating Paint

We got hold of an asphalt base aluminum paint which has a surprisingly high insulating value. It can be used on kettles to prevent heat loss through radiation; it will give a high insulating efficiency when painted over roofs and side walls, thus preventing or rather minimizing heat penetration in summer and heat loss in winter. The stuff is made by the Amalgamated Products Corp., New York City. A gallon is said to be enough to cover 500 square feet.

Tram Rails

One of the most flexible types of conveying system is provided by Cleveland Tram-Rail Co. This is nothing but an overhead track and trolley system. What interests us is the extraordinary number of devices provided by this company for handling all sorts of products. Do you wish to pick up barrels of mineral oil or any dry material and dump them into tanks? Tram-Rail has a barrel grab for that purpose. Do you need to pick up bales of crude drugs and turn them up on end? Tram-Rail has a gadget for that too. In short you can get a gadget with your tram-rail system for handling, cases, barrels, drums, tanks, bins, bales, trays or what have you. The more we study overhead conveying systems the more we are convinced that there are too many wheel trucks and too much hand-handling in the average plant. What impresses us most is that truck and trolley is so cheap. We bought a unit recently for one of our clients consisting of a forty-two foot rail section, a half ton hoist and trolley and a barrel grab. Total price $176.50.

New Tooth Paste Bases

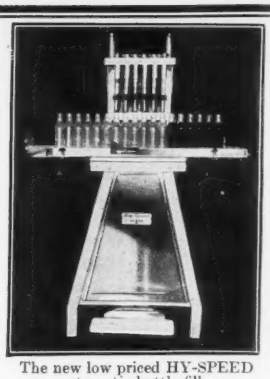
Those who have had difficulty in making milk of magnesia tooth paste will be interested in a new hydrated milk of magnesia base. It is said that the use of this material overcomes all hardening difficulties often encountered in making this kind of paste. Furthermore the use of the paste cuts down the time necessary to make a batch. It can also be used for making milk of magnesia by simply extending it with water in the proper proportions.

The same firm has also placed on the market a hydrated calcium carbonate paste which is said to make an excellent base for tooth paste. It is claimed that this paste is of such fine particle size that it is almost colloidal. All that need be done to make a finished tooth paste is to extend it with a small amount of excipient, add flavors, and if required, other polishing or cleansing agents.

NEW METHODS
for increasing your profits

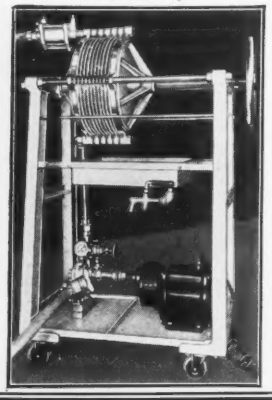
The importance of maintaining perfect uniformity in your finished product day after day cannot be overestimated. And the necessity for eliminating every bit of waste, is, of course, vitally important.

For the manufacture of drugs, perfumes, tonics, lotions, and kindred products many new HY-SPEED machines have been perfected to fulfill both aims. These machines are scientifically correct for turning out a perfect product, and carefully constructed for turning it out at the least possible cost.



The new low priced HY-SPEED automatic bottle filler

HY-SPEED #510 disc filter—for ultra brilliancy



MIXING

HY-SPEED mixers, 1/10 H.P. to 20 H.P. are designed for thorough mixing and perfect blending. One machine will mix many different batches—each one in less time.

FILTRATION

The new HY-SPEED disc filters are the last word in improved liquid polishing methods. They'll give your product not only "eye appeal" but "buy appeal."

BOTTLE FILLING

There's an improved HY-SPEED bottle filler for fulfilling any of your bottling requirements. The complete line of fillers carries the HY-SPEED guarantee of perfect performance.

ALSOP ENGINEERING CORP.
39 West 60th St. New York City

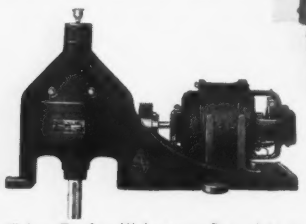
"NEW ENGLAND"

whether you need complete agitators, drives, stirrers, or fittings.

If agitation is the "sore point" in your process the chances are good that something in these lines will help it.

Illustration shows a series of tanks served by **one** "New England" agitator and (below) the particular drive used. Details of this set-up on request.

Single "New England" Agitator serving several tanks



"New England" Agitator Drive No. 3

NEW ENGLAND TANK AND TOWER COMPANY
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AGITATING EQUIPMENT SPECIALISTS

IMPROVE EMULSIONS and SUSPENSIONS

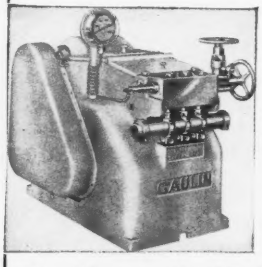
with the

Manton-Gaulin TWO-STAGE Homogenizer

EMULSIONS: Cod liver oil, castor oil, hand lotions, liquid creams, emulsified tonics and medicines. Homogenizing improves and stabilizes emulsions of all types.

SUSPENSIONS: Milk of magnesia, liquid face powder, colloidal sulfur, lotions and medicines. Homogenizing secures better dispersion and improves suspension of solids.

SOLUTIONS: Cough medicines, proprietaries, mouth washes, lotions. Homogenizing secures better distribution and solution of medicaments and perfumes.



The Manton-Gaulin Homogenizer is more effective and less expensive than a colloid mill. Sizes are available from twelve to several hundred gallons per hour.

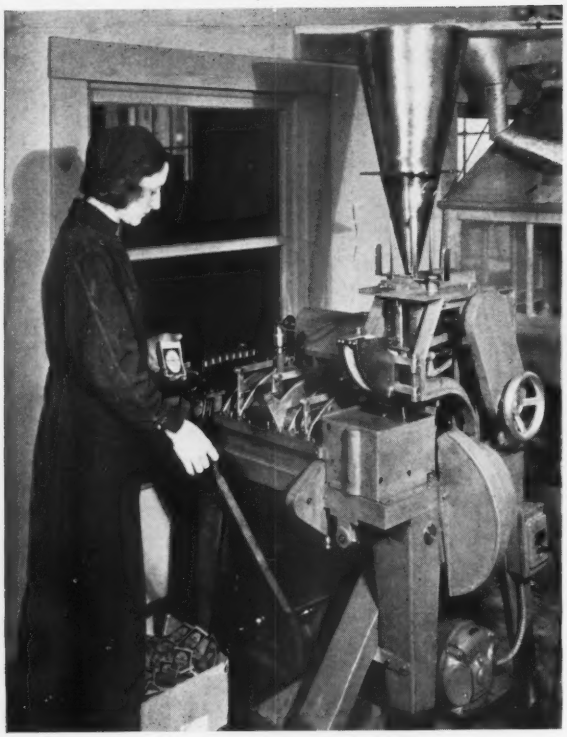
The Manton-Gaulin Manufacturing Co., Inc.
ST. JOHNSBURY, VERMONT

F. MILLOT is offering the face, dusting and talcum powders of its crepe de chine line in new packages. The face powder in a black metal box with an inside boeuf colored paper box is matched in the dusting powder with a black paper box with novel top in black and green. The talcum is associated to the other two by means of its gold top with the same green and black decoration.

MENNEN BRUSHLESS SHAVE is now packaged in a jar. This is in response to a demand from consumers who have become used to this form of container. Package follows the color scheme of the tube.

ABBOTT LABORATORIES is in the front ranks as as example of the modern appearance which can be applied to packages for ethical drug specialties. Metaphen tincture is in a square, easily gripped bottle closed with a plastic cap. Lubritine and Butesin Picrate Ointment are likewise closed with molded caps. Photo, courtesy of General Plastics.

THE NEW LA CROSS Nail Polish Kit has a cover made of green plastic material, and the bottom in which the bottles rest is of shiny black plastic material. The complicated space section was produced in one operation. Photo, courtesy of General Plastics.



THE NEWEST DEVELOPMENT IN ENVELOPE FILLERS!

dependable . . . fast . . . adjustable

With this improved Wright-Dalton envelope filler you can package, in any kind of envelope you choose;—tablets, pills, capsules, lozenges, face powder, mouth wash powder, curling powder, color rinses, seeds, ground herbs, etc. at speeds ranging from sixty per minute upward. The machine is adjustable both as to product, as to quantity and as to envelope size. A feature of the machine is that envelopes are drawn from the magazine by vacuum; another is that the envelopes are given a safety fold in addition to being glue sealed. The unit is compact, sturdy and fool-proof and one operator can handle the entire machine.

Send samples of your envelope and your product and we'll be glad to quote prices on the most advanced envelope filler ever offered.

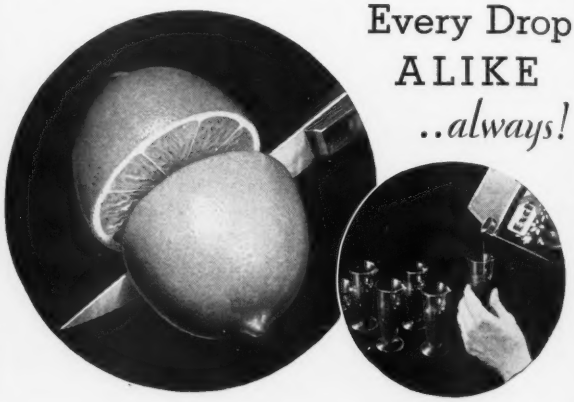
Wright-Dalton Machinery Co.

PLANT: Durham, N. C.

SALES OFFICE:
Room 1805, 220 West 42nd St.
New York City

True Lemon Flavor

IN EVERY DROP . . . *and* Every Drop ALIKE *. . always!*



Forget the low price of Exchange Brand Clarified Oil of Lemon. Compare it on quality alone.

FOR flavor—for uniformity—you can buy no finer Oil of Lemon for straight or extract use than Exchange Brand "Clarified."

Every drop holds flavor suggesting the fresh-cut fruit, because it is 100% Cold Pressed from rich California lemons. No heat is applied in producing it, so *all* of the flavoring constituents are retained.

Every drop is like every other drop in every characteristic. Exchange methods eliminate seasonal variations. Once your formula is set the lemon flavor of your product never changes.

And only the Exchange process includes Clarification—removal of unwanted substances that cause turbidity in extracts and impair purity of flavor.

Give it every test. See if Exchange Brand Oil of Lemon does not outperform and out-value other oils.

Important Facts:

1. **Flavor** that suggests a freshly-cut lemon
2. Finer **Aroma**
3. Deep natural **Color**
4. **Stable** in your finished product
5. **Uniform Performance** Every ounce like every other ounce
6. **Lower Cost** per unit of flavor
7. **CLARIFIED.** No sediment. No cloud. No **filtration.** No waste.

TO LEMON EXTRACT MANUFACTURERS—Add 95% alcohol to Exchange Brand Oil of Lemon and get immediately a clear lemon extract. No cloud. No delay. No waste. A 5% by volume solution in alcohol conforms to the U. S. Government's definition of lemon extract.

Exchange

OIL OF LEMON

Sold to the American market exclusively by

DODGE & OLCOTT COMPANY
180 Varick Street, New York City

FRITZSCHE BROTHERS, INC.
78-84 Beekman St., New York City

Distributors for

CALIFORNIA FRUIT GROWERS EXCHANGE
Products Department, Ontario, California
Producing Plant: EXCHANGE LEMON PRODUCTS CO., Corona, Calif.

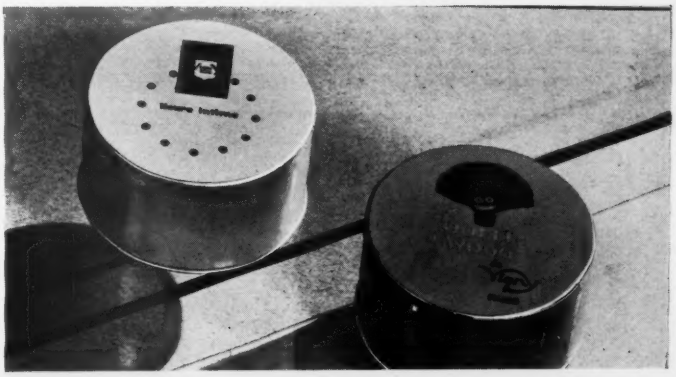
Copr., 1934, Products Department, California Fruit Growers Exchange

"DOUBLE WHIPPED Cleansing Cream" is the latest creation of Dorothy Gray. This remarkably fine and penetrating cream acts both as a cleanser and a lubricant. It is packaged in the characteristic manner. Dorothy Gray has also just brought out a new black leather traveling beauty case lined with gray satin, square in shape but flat and not bulky. It contains the essentials for treatment and make-up as well as additional pockets for accessories.

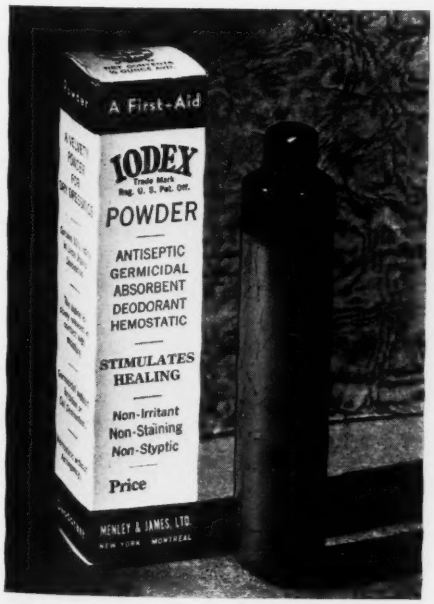
A GRACEFUL new color capped fluted flacon has been chosen by Coty for its sachet which may be had in the Coty odors, "L'Aimant," "L'Origon," "Paris," "Chypre," "Emeraude," "Styx," "La Rose Jacqueminot."

AL. ROSENFELD Inc. has presented face powders in the Golli Wogg and the Vigny "Heure Intime" lines. The latter line also has a new dusting and talcum. These are packaged in cartons typical of the Golli Wogg perfume, in red and black container; and the "Heure Intime" in the blue with silver decorations. The shades are natural and Rachel No. 1 and No. 2.

A NEW DUSTING powder package with an enameled metal top in black, powder blue, pink or green combined with white and nickel is the most recent presentation of the House of Tre-Jur. The odors are gardenia, sweet pea, bouquet, and jasmin. New compacts have also been devised, the one in flower print decorated case and the other round in the popular spring shades. Both are singles, the former the sifter type and the latter for loose powder.



MENLEY & JAMES, Ltd., New York, is offering its new "Iodex" powder for use wherever dry antiseptic dressings are indicated. It contains 10 per cent iodine loosely combined with an organic oleaginous base and is recommended as an antiseptic and germicide, parasiticide, deodorant and hemostatic. It is packaged in a brown and black celluloid tube with folding carton to match.



For Modern Cosmetics We Offer —

PROTEGIN X
odorless absorption (oxycholesterin) base

EMULSIFIER 157
base for liquid emulsions and brushless shaves

TEGIN
base for neutral, greaseless creams

NIPAGIN M
to preserve gum and quince lotions

NIPASOL M
to preserve the vegetable oils

Th. Goldschmidt Corp.

70 Pine Street — New York

Italian Talc

Fifty years of practical experience has proved to the master perfumers throughout the world that Italian Talc is the only one that possesses all the features necessary to produce a fine powder.

They have found it uniform and reliable and therefore they insist on Italian Talc exclusively.

Exclusive representatives of the Italian Producers

Chas. Mathieu, Inc.

120 Liberty St. — New York City

. . . We welcome your inquiries and will be glad to send samples . . .

Medicine Code

(Continued from page 574)

Title I of the National Industrial Recovery Act, and the Administrator for Industrial Recovery.

SECTION 7. The term "export" as used herein shall include, in addition to shipments to foreign countries, shipments to territories and possessions of the United States.

SECTION 8. The term "primary distributor" as used herein shall mean a wholesale dealer or retail dealer to whom a member of the Industry sells its products directly.

SECTION 9. *Definitions of personnel.*—(a) The term "executive" as used herein shall mean an employee solely responsible for the management of a business or a recognized subdivision thereof.

(b) The term "outside salesman" shall mean a salesman who is engaged not less than sixty (60) per cent of his working hours outside the establishments, or any branch thereof, by which he is employed.

(c) The term "research and scientific worker" as used herein shall mean an employee engaged primarily in research and scientific work where special education or scientific training is essential.

(d) The term "outside service employee" as used herein shall mean an employee engaged not less than sixty (60) per cent of his working hours in delivering, installing, and/or servicing merchandise outside of the establishment and shall include stable and garage employees.

(e) The term "watchman" as used herein shall mean an employee engaged primarily in safeguarding the premises and property of a member of the Industry.

(f) The terms "firemen" and "engineers" as used herein shall mean employees engaged primarily in the upkeep, preservation, operation and repair of furnaces, boilers, engines, pumps, compressors, heating and ventilating equipment, electrical generating plants, or other machinery used for supplying heat, light, ventilation, or power to a building or plant of a member of the Industry; but do not include such employees as porters, elevator operators, cleaners or operators of machines used directly in a manufacturing process.

(g) The term "apprentice office worker" as used herein shall mean an office employee with less than six (6) months total office work experience.

(h) The terms "beginner" or "learner" as used herein shall mean an employee with less than sixty (60) days working experience in the Industry.

ARTICLE III—HOURS

SECTION 1. No watchman, fireman, engineer, or outside service employee shall be permitted to work in excess of forty-eight (48) hours per week averaged over a consecutive two weeks' period and in no event shall be permitted to work in excess of twelve (12) days in any consecutive fourteen (14) day period.

SECTION 2. No other employees except pharmacists, chemists, executives, and research and scientific workers earning in excess of thirty-five (35) dollars per week, and outside salesmen, shall be permitted to work in excess of forty (40) hours in any one week or eight (8) hours in any twenty-four (24) hour period, except as hereinafter provided in Sections 3 and 4 of this Article, and in no event shall any such employee be permitted to work in excess of six (6) days in any consecutive seven (7) days' period.

SECTION 3. (a) The maximum hours fixed in the foregoing section shall not apply to any employee on emergency maintenance or emergency repair work involving breakdowns or protection of life or property, but in any such special case such employees shall be paid at the rate of at least time and one third (1 1/3) for hours worked in excess of the maximum hours herein provided.

(b) No employee working on continuous process operations shall be permitted to work in excess of twelve (12) hours in any one day or more than forty (40) hours in any one week.

SECTION 4. During a peak period of not to exceed eight (8) weeks in any calendar year, any employee may be permitted to work not in excess of forty-eight (48) hours in any one week; provided, that he shall not be permitted to work more than eight (8) hours in any twenty-four (24) hour period, and that hours in excess of forty (40) per week shall be compensated for at the rate of time and one-third (11/3).

SECTION 5. No employer shall knowingly permit any employee to work for any time which when totalled with that already performed with another employer, or employers, exceeds the maximum permitted herein.

ARTICLE IV—WAGES

SECTION 1. No employee, other than apprentice office workers, and beginners and learners, shall be paid at less than the rate of thirty-five (35) cents per hour, except employees in the States of North Carolina, South Carolina, Georgia, Florida, Tennesee, Alabama, Mississippi, Arkansas, Louisiana Oklahoma and Texas where the minimum rate shall be two and one half (2½) cents less per hour.

SECTION 2. No apprentice office worker, beginner or learner shall be paid less than eighty (80) per cent of the rates specified in Section 1 of this Article. Employees of this class thus compensated shall not exceed five (5) per cent of the total number of employees in any establishment.

SECTION 3. The weekly compensation of all employees as of June 16, 1933, shall not be reduced, notwithstanding that the hours worked in such employment may be hereby reduced. Methods of adjustment in hourly rates made since June 16, 1933 shall be reported to the Code Authority.

SECTION 4. Female employees performing substantially the same work as male employees shall receive the same rate of pay as male employees.

SECTION 5. This Article establishes a minimum rate of pay which shall apply irrespective of whether an employee is actually compensated on a time-rate, piece-rate, or other basis.

SECTION 6. No employee now employed at a rate in excess of the minimum shall be discharged and reemployed at a lower rate for the purpose of evading the provisions of this Code.

SECTION 7. A person whose earning capacity is limited because of age, physical or mental handicap, or other imfirmity, may be employed on light work at a wage below the minimum established by a Code, if the employer obtains from the state authority designated by the United States Department of Labor, a certificate authorizing such person's employment at such wages and for such hours as shall be stated in the certificate. Such authority shall be guided by the instructions of the United States Department of Labor in issuing certificates to such persons. Each employer shall file monthly with the Code Authority a list of all such persons employed by him, showing the wages paid to, and the maximum hours of work for, such employee.

ARTICLE V—GENERAL LABOR PROVISIONS

SECTION 1. No person under sixteen (16) years of age shall be employed in the industry. No person under eighteen (18) years of age shall be employed at operations or occupations hazardous in nature or dangerous to health. The Code Authority shall submit to the Administrator within six (6) months after the effective date of this Code a list of such operations or occupations. In any State an employer shall be deemed to have complied with this provision as to age if he shall have on file a certificate or permit duly issued by the Authority in such State empowered to issue employment or age certificates or permits showing that the employee is of the required age.

SECTION 2. In compliance with Section 7 (a) of the Act, it is provided:

(a) That employees shall have the right to organize and bargain collectively, through representatives of their own choosing, and shall be free from the interference, restraint, or coersion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.

(b) That no employee and no one seeking employment shall be required as a condition of employment to join any company union or to refrain from joining, organizing, or assisting a labor organization of his own choosing, and

(c) That employers shall comply with the maximum hours of labor, minimum rates of pay, and other conditions of employment approved or prescribed by the President.

SECTION 3. No employer shall reclassify employees or duties of occupations performed or engage in any subterfuge for the purpose of defeating the provisions of the Act or of this Code.

SECTION 4. Every employer shall provide for the safety and health of his employees at the place and during the hours of their employment. Standards for safety and health shall be submitted by the Code Authority to the Administrator within six (6) months after the effective date of this Code, and upon approval by the Administrator such standards shall become operative as a part of this Code.

SECTION 5. No provision in this Code shall supersede any State or Federal law which imposes more stringent requirements on employers as to age of employees, wages, hours of work, or as to safety, health, sanitary or general conditions, or insurance, or fire protection, than are imposed by this Code.

SECTION 6. All employers shall post complete copies of this Code in conspicuous places accessible to employees.

SECTION 7. The hours worked by any employee, except outside salesmen, during each day shall be consecutive, provided that an interval not longer than one hour may be allowed for each regular meal period, and such interval not counted as part of the employee's working time. Any rest period which may be given employees shall not be deducted from such employee's working time.

SECTION 8. No homework shall be allowed in this industry.

ARTICLE VI—ORGANIZATION, POWERS, AND DUTIES OF THE CODE AUTHORITY ORGANIZATION

SECTION 1. A Code Authority is hereby constituted to administer this Code. This Code Authority shall consist of five (5) members selected as hereinafter provided, and in addition thereto, the Administrator in his discretion may appoint not more than three additional members, without vote and without expense to the Industry, to represent such groups or governmental agencies as he may designate.

SECTION 2. The industry members shall be selected as follows:

Upon approval of this Code, the Code Committee presenting this Code and the Industrial Advisor for this Industry shall select a list of twenty (20) names of individuals identified with this Industry and representative of the various interests therein, not more than nine (9) of whom shall be members of any one trade association. This list, with the trade association and company affiliations of each individual opposite his name, shall be printed upon a ballot which shall in addition bear upon its face five (5) blank lines and a certificate of assent to and compliance with this Code. This ballot together with a copy of this Code shall be mailed to all members of the Industry whose names are known or can be ascertained by diligent search by the Code Committee. Each such member of the Industry will be instructed that he must signify assent to and compliance with this Code in order that his vote shall be counted. Each member of the Industry signing the certificate of assent and compliance will be entitled to five (5) votes. The member of the Industry may select the individuals for whom he wishes to vote from the printed list upon the ballot or by writing in such other names as he wishes upon the blank lines provided therefor. The ballot as so marked, with the certificate of assent and compliance duly signed, will be mailed to the Code Committee, who in counting the votes will be governed by the following rules:

(a) The Industrial Adviser will aid and supervise in the counting of the votes.

(b) A list shall be made of individuals in the order of the highest number of votes received per individual. In order that no one trade association shall have more than two (2) of its members upon the Code Authority, if the Code Committee shall find that the first five individuals in order upon said list include more than two (2) members of any one trade association, the Code Committee shall delete from said list the names of the members of said trade association over the two receiving the highest number of votes and shall write in their places the names of the first individuals in order upon said list (after the first five) who are not members of said trade association.

(c) The individuals who stand as the first five on the list, after the above procedure has been carried out, shall be notified and shall take office as members of the Code Authority immediately upon their acceptance of the office. If any individual shall decline or be disqualified or unable to take office, his name upon the list shall be replaced by the first name in order on said list (after the first five) which will not give any one trade association more than two (2) members on the Code Authority.

(d) The Code Committee with the approval of the Industrial Adviser shall make such additional rules for the election as it deems necessary; and specifically make such rules as will enable the election to be completed within thirty (30) days after the effective date of this Code.

Pending the completion of the election of the industry members of the Code Authority, the members of the Code Committee will act as such industry members; provided that if such election is not completed within thirty (30) days after the effective date of this Code, the Administrator or his deputy may appoint five (5) individuals, identified with this Industry and representative of the various interests therein, to act as the industry members of the Code Authority and to relieve the Code Committee of all duties herein delegated to it, and to serve until such election is completed.

The members of the Code Authority shall serve for a term of one year from the date of taking office. At a sufficient time in advance of the end of the term of the members of the Code Authority, the Code Authority shall initiate and carry out an election of new members for the ensuing year, so that these new members shall take office at the end of the term of the old members. The Code Authority shall assume the duties of the Code Committee and the Administration Member shall assume the duties of the Industrial Advisor in carrying out said election by the method hereinabove set forth.

If a vacancy occurs in the industry membership of the Code Authority, the remaining industry members shall elect a temporary member to fill such vacancy until the next regular election, provided that this temporary member shall be representative of the same trade association or independent interests that were represented by the member whose place he takes.

SECTION 3. Members of the Industry shall be entitled to participate in and share the benefits of the activities of the Code Authority and to participate in the election of the members thereof by assenting to and complying with the requirements of this Code and sustaining their reasonable share of the expense of its administration. Such reasonable share of the expense of administration shall be determined by the Code Authority, subject to approval by the Administrator, on the basis of volume of business and/or such other factors as may be deemed equitable.

SECTION 4. Nothing contained in this Code shall constitute the members of the Code Authority partners for any purpose. Nor shall any member of the Code Authority be liable in any manner to anyone for any act of any other member, officer, agent, or employee of the Code Authority. Nor shall any member of the Code Authority exercising reasonable diligence in the conduct of his duties hereunder be liable to anyone for any action or omission to act under the Code, except for his own willful misfeasance or nonfeasance.

SECTION 5. Each trade or industrial association directly or indirectly participating in the selection or activities of the Code Authority shall (1) impose no inequitable restrictions on membership, and (2) submit to the Administrator true copies of its articles of association, by-laws, rules or regulations, and all amendments when made thereto, together with such other information as to membership, organization, and activities as the Administrator may deem necessary to effectuate the purposes of the Act.

CETOQUINOL

A new and extremely valuable perfume and fixative material reasonably priced which has lately been developed by

N. V. POLAK & SCHWARZ - HOLLAND

When used with your perfume, powder or bath salt compositions, the lasting quality of the perfume odor will be materially increased.

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A full line of their products carried in this country

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Aromatic Chemical Co. Inc.
667 WASHINGTON STREET NEW YORK, N. Y.

Only Pure White Beeswax will produce Pure White Cream. T. L. Beeswax has been the standard for more than eighty years. Samples on request.

Pioneer Brand Pure Refined
Yellow Beeswax
Ideal for lemon creams and similar preparations.

THEODOR LEONHARD WAX CO., Inc.
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A. C. DRURY & CO., Inc.
219 E. North Water St.
Chicago, Illinois

Pacific Coast
ALBERT ALBEK, Inc.
515 So. Fairfax Ave.
Los Angeles, Calif.

SECTION 6. In order that the Code Authority shall, at all times, be truly representative of the Industry and in other respects comply with the provisions of the Act, the Administrator may provide such hearings as he may deem proper; and thereafter if he shall find that the Code Authority is not truly representative or does not in other respects comply with the provisions of the Act, may require an appropriate modification in the method of selection of the Code Authority, or any sub-Code Authority.

SECTION 7. *Powers and Duties.*—The Code Authority shall have the following powers and duties:

(a) To adopt by-laws and rules and regulations for its procedure and for the administration and enforcement of this Code, in accordance with the powers herein granted, and to submit the same to the Administrator for his approval together with true copies of any amendments or addition when made thereto, minutes of meetings when held and such other information as to its activities as the Administrator may deem necessary to effect the purposes of the Act.

(b) To obtain from members of the industry for use of the Code Authority, for the Administrator in the administration and enforcement of the Code, and for the information of the President, reports based on periods of one, two or four weeks, or multiples thereof, as soon as the necessary readjustment within the industry can be made and to give assistance to members of the industry in improving methods or in prescribing a uniform system of accounting and reporting. All individual reports shall be kept confidential as to members of the industry and only general summaries thereof may be published.

(c) Subject to rules and regulations issued by the Administrator, to receive complaints of violations of this Code, make investigations thereof, and bring to the attention of the Administrator recommendations and information relative thereto for such action as, in his discretion, the facts warrant.

(d) To use such trade associations and other agencies as it deems proper for the carrying out of any of its activities provided for herein and to pay such trade association and agencies the cost thereof, provided that nothing herein shall relieve the Code Authority of its duties or responsibilities under this Code and that such trade associations and agencies shall at all times be subject to and comply with the provisions thereof.

(e) To coordinate the administration of this Code with such other codes, if any, as may be related to the industry, or any sub-division thereof, and to delegate to any other administrative authority, with the approval of the Administrator, such powers as will promote joint and harmonious action upon matters of common interest, provided that nothing herein shall relieve the Code Authority of its duties or responsibilities under this Code.

(f) Subject to the approval of the Administrator, to secure an equitable and proportionate payment of the expenses of maintaining the Code Authority and its activities from members of the Industry assenting to the Code.

(g) To cooperate with the Administrator in regulating the use of the National Recovery Administration Code Insignia solely by those members of the Industry who are complying with this Code.

(h) To initiate, consider, and make recommendation for the modification or amendment of this Code.

(i) The Code Authority shall appoint representatives to serve on any Drug Industry Coordinating Council which may be established to be composed of representatives from the various code authorities governing codes which are directly related to the drug industry, and to act as a planning and coordinating agency, and as an agency for the stabilization of employment, for the entire drug industry.

SECTION 8. If the Administrator shall determine that any action of a code authority or any agency thereof may be unfair or unjust or contrary to the public interest, the Administrator may require that such action be suspended to afford an opportunity for investigation of the merits of such action and further consideration by such code authority or agency pending final action which shall not be effective unless the Administrator approves or unless he shall fail to disapprove after thirty (30) days' notice to him of intention to proceed with such action in its original or modified form.

SECTION 9. *General Administrative Provisions.*—In addition to the information required to be submitted to the Code Authority as set forth in this Article members of the Industry shall furnish such statistical information as the Administrator may deem necessary for the purposes recited [1]n Section 3 (a) of the Act to such Federal and State agencies as the Administrator may designate; and nothing in this Code shall relieve any member of the Industry of any existing obligations to furnish reports to Government agencies.

An appeal from any action by the Code Authority affecting the rights of any employer or employee in the Industry may be taken to the Administrator.

ARTICLE VII—TRADE PRACTICE PROVISIONS

SECTION 1. (a) A member of the Industry shall sell his products, commodities or articles to primary distributors on an open price basis that is fair to all, with the same allowances, terms and prices as to products, quantities or trade classifications.

(b) The term "open prices" as used in this section means a price list which is published by each member of the Industry for the equal information of all primary distributors in the separate or the several classes of primary distributors, and which states all the prevailing terms of sale for the separate or the several classes or primary distributors.

(c) Compensation paid to a primary distributor by a member of the Industry for cooperative advertising, counter displays, window displays, salesmen's efforts, or any other special sales activities, shall be uniform according to kind and scope of services rendered, and not on a basis of discounts on quantity purchases.

(d) Each member of the Industry or his agent shall file his current price list with the Code Authority within thirty (30) days after the approval of this Code. Each member of the Industry shall file (by registered mail) any subsequent revision of such price list with said Code Authority.

(e) This section shall not apply to the sale of private brand products on contract by a manufacturer to the owner of such private brand, nor to the sale of products for export, nor to bids submitted to governmental units.

SECTION 2. No member of the Industry shall use advertising, whether printed, radio, display or of any other nature, which is inaccurate in any material particular or misrepresents merchandise (including its use, trade-mark, grade, quantity, size, origin, material, content preparation, credit terms, values, policies, or services), and no member of the Industry shall use advertising and/or selling methods concerning curative or therapeutic effects which are false and fraudulent.

SECTION 3. No member of the Industry shall use advertising which refers inaccurately in any material particular to any competitor or his merchandise, prices, values, credit terms, policies, or services.

SECTION 4. No member of the Industry shall give, permit to be given, or directly offer to give, anything of value for the purpose of influencing or rewarding the action of any employee, agent or representative of another in relation to the business of the employer of such employee, the principal of such agent or the represented party, without the knowledge of such employer, principal or party. This rule shall not be construed to prohibit the free and general distribution of articles commonly used for advertising except so far as such articles are actually used for commercial bribery as hereinabove defined.

SECTION 5. The repacking or transferring of any article from the container of the member of the Industry into another container, and the offering of such repackaged item for sale with intent or capacity to deceive the purchaser is an unfair trade practice.

SECTION 6. The unauthorized use of a copy, counterfeit, or colorable imitation of the trade-mark, label, or identifying name or device of the product of another corporation, association, firm, or person which has the tendency and capacity to mislead purchasers or prospective purchasers is an unfair trade practice.

SECTION 7. No member of the Industry shall secretely offer or make any payment or allowance of a rebate, refund, commission, credit, unearned discount or excess allowance, whether in the form of money or otherwise, for the purpose of influencing a sale, nor shall a member secretly extend to any customer any special service or privilege not extended to all customers of the same class.

ARTICLE VIII—MODIFICATIONS

1. This Code and all the provisions thereof are expressly made subject to the right of the President, in accordance with the provisions of subsection (b) of Section 10 of the National Industrial Recovery Act, from time to time to cancel or modify any order, approval, license, rule, or regulation issued under Title I of said Act and specifically, but without limitation, to the right of the President to cancel or modify his approval of this Code or any conditions imposed by him upon his approval thereof.

2. This Code, except as to provisions required by the Act, may be modified on the basis of experiences or changes in circumstances, such modification to be based upon application to the Administrator and such notice and hearing as he shall specify, and to become effective on approval of the President.

ARTICLE IX—MONOPOLIES, ETC.

No provision of this Code shall be so applied as to permit monopolies or monopolistic practices, or to eliminate, oppress, or discriminate against small enterprises.

ARTICLE X—PRICE INCREASES

Whereas the policy of the Act to increase purchasing power will be made more difficult of consummation if prices of goods and services increase as rapidly as wages, it is recognized that price increases except such as may be required to meet individual costs should be delayed. But when made such increases should, so far as possible, be limited to actual increases in the seller's costs.

ARTICLE XI—GENERAL

1. No member of the industry shall use any subterfuge to frustrate the spirit and intent of this Code, which is, among other things, to increase employment, to remove obstructions to commerce, to shorten hours of work, and to raise wages.

2. Except as may be subsequently provided in a specific or supplementary export Code for the industry, the provisions of this Code now or hereafter adopted with regard to prices, discounts, deductions, allowances, extras, commissions, or methods and/or terms of sale, are not to apply to direct export sales in course of export, i.e., sales destined ultimately for export.

ARTICLE XII—EFFECTIVE DATE

This Code shall become effective on the second Monday after its approval by the President.

[1]See paragraph 2 of order approving this Code.

Petrolatum in Pharmaceuticals and Cosmetics

(Continued from page 583)

U. S. P. petrolatum can be divided into three main groups according to melting point and consistency. Each group is then subdivided according to color into individual grades.

Group I: Medium Melting Point and Consistency

These are the standard petrolatums of commerce and are used in largest volume. They are best suited for use in pharmaceutical salves, cosmetic creams, hair dressings, etc. Petrolatum of this group has a melting point of 115-120° F. and is produced in different colors ranging from amber to an almost colorless alba white.

Group II: Low Melting Point and Soft Consistency

Petrolatum belonging to this group is especially well adapted for repackaging in jars or tubes for resale as Petroleum Jelly for household use where a soft, easily spreading consistency is desirable. It is principally intended for use as is or with very little compounding with U. S. P. oils, and also when a large amount of solid ingredients are to be added to the petrolatum. Its soft consistency and rapid liquefying properties (melting point 105-110° F.) makes it particularly suitable for salves of all kinds. It is often referred to as "collapsible tube grade" or "ointment grade."

Group III: Petrolatum of High Melting Point and Medium Consistency

These petrolatums are needed in such cases where the addition of oil or other liquid substances would otherwise reduce the melting point to below that normally required. The melting point of these petrolatums is in the range of 125-130° F.

THE ANSWER TO A DEMAND

PARAGON OLIVE OIL

Consumers are learning more and more to judge and request good, **real** Olive Oil . . . PARAGON, "the druggist's own olive oil", is the answer to this demand.

Of the tremendous quantity of Olive Oil imported into this country, none is comparable to or of finer quality than PARAGON. Its delightful nut-like flavor commends it to all consumers.

Virgin quality, produced under the most sanitary conditions and packed in ½ pint, pint, quart, gallon and five gallon handsomely decorated tins, hermetically sealed, to insure freshness and purity.

Also the famous 4 ounce Jug. This latter package sells fast of its own accord. Housewives readily appreciate that it may be placed on the table with propriety.

PARAGON OLIVE OIL in all sizes is distributed exclusively through the wholesale and retail drug trades. Address Desk "J" for new prices, special discounts and advertising material.

MAGNUS, MABEE & REYNARD, Inc.

32 CLIFF STREET NEW YORK CITY

Mohawk Brand Oil Peppermint
Essential Oils
Infused Oils
Oleoresins
Balsams

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Terpeneless Essential Oils
Basic Flavoring Materials
Aromatic Chemicals
Natural Isolates
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Do You Need a

"Stringy" Gum

for Wave Sets?

GUM No. 17

meets all requirements. Use only ¾ to 1 oz. per gallon. Yields a water white solution which leaves no flakes; will tolerate 25% of alcohol without precipitation.

Prices (f.o.b. New York)

Up to 25 lbs.	**$1.00 per lb.**
25 lbs.	**.90 per lb.**
50 lbs.	**.80 per lb.**
100 lbs.	**.75 per lb.**

Single pound trial lots $1.25 postpaid

Also full line of colors and preservatives for wave sets

Send for complete list of all our cosmetic materials

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Specializing in
Chemicals for the Cosmetic Industry

MYSORE GOVERNMENT Sandalwood Oil

Distilled from
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INSIST ON ORIGINAL CANS AND CASES

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Essential Oils
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PERFUMERS' SHELF

Fixation

Fixation has always been a problem of vital importance to the perfumer since the beginning of the art of perfuming. The ancients were always striving to produce a perfume which would last and those odors which were of the volatile type were never popular. Their method of fixation was mainly accomplished by the addition of a little extract of musk or gum resin, but today the modern perfumer has at his disposal not only the natural fixatives, but the artificial ones as well. The buying public of today demands a perfume with tenacity, and a product lacking this prerequisite is never successful.

The problem to be solved by the perfumer is the use of the right fixator for his particular product, and in order to aid in its selection it is necessary to classify fixatives in three definite groups, namely: 1. Animal; 2. Vegetable; 3. Synthetic or Artificial.

The natural fixatives are most generally known, such as ambergris, civet, musk, castoreum, etc., and not only are they valuable in this capacity, but they give life and warmth to the perfume in which they are used.

Vegetable types can be classified as the oleoresins of benzoin, labdanum, oak moss, sandalwood, vetivert, etc., some essential oils and balsams. Essential oils as a rule do not possess tenacious odors, but some of them, especially those distilled from woods or roots, have favorable fixing properties. The higher the boiling points of the oils, the better is their fixing properties. A new and excellent fixative recently introduced in this market is lavender concrete, and its use in place of the oil of lavender flowers will add tenacity to the eau de cologne or perfume.

Under the classification of artificial fixatives there are first of all a group of odorless fixatives such as diethyl phthalate, benzyl benzoate, benzyl alcohol and benzyl salicylate. Benzyl benzoate and diethyl phthalate must be used with caution since in some types of odors they tend to make the oil smell flat and lifeless. Benzyl salicylate, though slightly more expensive, is much more desirable, especially in lily or lilac types and is daily gaining in popularity for this purpose.

Books could be written on artificial fixatives having an odor value and designating particular uses for each, but in these days of low prices the most popular are the crystals such as coumarin, vanillin, the artificial musks, benzyl isoeugenol, etc. They play their particular part in every perfumed cosmetic as well as aiding in the deodorizing of many commercial products. There are also many valuable specialties of the aromatic chemical manufacturers both here and abroad having remarkable fixative properties, and these manufacturers have spent considerable sums of money in perfecting new and unusual products for this purpose.

It is therefore necessary for the perfumer to combine his various types of fixatives to produce a ground-work for his new creation, and careful selection of these materials from the three named classifications, carefully blended, will contribute greatly to the success of his finished product.

Methyl Naphthyl Ketone

This white crystalline product has found an important place in the fabrication of orange blossom types of odors and is an excellent fixative. It melts at 54° C. and is readily soluble in benzyl benzoate, benzyl alcohol, diethyl phthalate and alcohol. It lacks odor value in comparison with the naphthol esters, bromelia and yara yara, but imparts an excellent softening effect to artificial neroli types. It does not discolor creams, powders, perfumes, or soap and is very stable. Lately there has been introduced to this market a liquid methyl naphthyl ketone which has a decidedly greater odor value than the crystalline product and appears to have greater possibilities especially in perfuming of soaps. It is sometimes introduced in powder odors by grinding in a mortar and mixing through the powder in its crystalline form.

Methyl Heptine Carbonate

This is one of the most difficult aromatic chemicals to manufacture, but it has been available to the perfumer since 1904. It immediately found a place in violet compositions, but later was adapted to other uses. Over the past two years it has been more generally used due mainly to the public demand for flowery odors, especially of the gardenia type. However, due to its great strength it should be used in ten per cent alcoholic solution in order to prevent overloading the mixture.

This product is not especially adapted to soaps, but is excellent in creams, perfumes, and talcs.

Where a softer, leafy character is desired, methyl octine carbonate will be found more desirable, and this product is steadily gaining in popularity due to this characteristic. Both of these products, however, are quite expensive and therefore they find a limited use in the cheaper preparations. However, if caution is used in blending these products with the compound in question, excellent results will be obtained where a flowery note is desired.

Catoquinol

This is a new product of Pollack & Schwarz which is said to be of exceptional interest as a new type of aromatic for use in perfume and talcs. It is said to have excellent fixative properties, and is said to impart an entirely new and distinctive character to new preparations.

Of Interest To Perfumers

The use of synthetic aromatics giving a fresh leafy note to perfumes is of increasing importance in modern perfumery, two of the best known being methyl-heptine-carbonate for use in violet perfumes and phenylacetaldehyde-dimethylacetal for use in lilac and other floral compositions. Phenylpropyl-dimethyl-ether is a more recent addition to this class of perfumery materials. It is specially suitable for use in rose compositions, and may also be usefully employed in various other floral perfumes.

Among less known synthetics there may be mentioned eugenyl formate, terpinyl cinnamate and terpinyl valerate. The odor of eugenyl formate resembles that of eugenol, but has an orris note. The substance has been especially recommended for use in perfumes of the origan type. It may also be used in carnation perfumes. Terpinyl cinnamate has an odor allied to that of terpineol itself. It has fixative properties, and may be incorporated in face powder without the development of a musty odor, which is such a troublesome characteristic of terpineol. Terpinyl valerate is known chiefly as a tobacco perfume, but used with discretion it is of great value for building up perfumes of an Oriental type, more especially in conjunction with artificial ambers and oil of vetivert or vetivert acetate.

Lovage oil offers interesting possibilities in the compounding of perfumes but is not well-known. The oil distilled from the root of the plant has an odor which recalls that of a mixture of angelica root, oakmoss and celery seed. The celery note developing strongly on exposure. The possibility of using lovage oil in fine perfumery needs further investigation, and experiments with this end in view should yield interesting results.

READERS'

Inquiries must be addressed department on the letterhead of firms. Inquiries from private

Cream Troubles

We have been having a lot of trouble with the enclosed cold cream formulas. The first two tend to separate and tend to discolor. Any help your technical department can give will be appreciated. New York.

An inspection of your formulas indicates that the two formulas are out of balance with respect to the amount of borax used. This makes a great difference in cold creams. From .9 to 1% is ample. We suggest that you use the same ingredients but change the borax to one per cent. This will probably solve your difficulty. Another experimental method can be tried, namely: begin with one per cent of borak and ten per cent of beeswax, with the water and oil constant. Then, maintaining the borax at one per cent make up successive samples increasing the beeswax by three per cent each time. In this way you can find a cream that will exactly fill the bill. We can't understand why the first formula discolors unless it is the perfume; the second evidently discolors due to an excess of lanolin.

Cloudy Mouth Wash

Our mouth wash has given us a lot of trouble lately due to cloudiness. We homogenize it but can't seem to get rid of the cloudy effect. Can you offer us any suggestions as to how we can go about licking this problem? Your paper is the best one that we have ever seen. Milwaukee.

We suppose that your mouth wash contains a considerable percentage of essential oil. If so homogenizing might tend to produce an emulsifying effect which would give you the cloudy appearance. We think that if you chill the wash after it has been homogenized and then filter it immediately, you will overcome the difficulty. Try this and let's know how it turns out.

Protective Cream

We want to make a protective cream for gardeners and mechanics hands and for general kitchen work. This cream we propose to use for both men and women and knowing the valuable service offered by your Questions and Answers Department, we thought maybe you would help us out. Winona, Minn.

We suggest that you make a vanishing type hand cream as follows: glyceryl mono stearate 8 parts, magnesium stearate 14 parts, beeswax 3 parts, petrolatum 10 parts, mineral oil 5 parts, water 60 parts. A heavy wax type cream might do the trick and it is also possible that a rubber latex cream would be just the thing.

The New Hennas

Can you tell us what these new hennas such as blonde and gold and brown are made out of? We got some of the stuff which is sold here in Los Angeles and it doesn't look anything like henna to us. Los Angeles.

It isn't. We think you'll find upon analysis that the products you mention consists of tartaric acid with dyes added to produce the indicated tints on the hair.

Filling Creams

We have been having an immense amount of trouble filling our creams into jars in a cold condition. We seem to be unable to get rid of air bubbles without a great deal of pounding. Isn't there some kind of vibrating table suitable for small production such as ours? Kansas City.

(Editor's Note: A similar inquiry was received from the same city in regard to a starch massage cream in connection with which the same difficulty is encountered.)

Both of these problems have two aspects. One lies in mixing, the other with filling. If air is already entrapped in the cream when it is ready for filling, then neither of enquirers is using the right type of mixing equipment. Such product should be made at slow speeds especially after they have begun to solidify. The second aspect of the problem is encountered through incorrect filling. Products of this kind should be filled from the bottom of the container upward. Do not allow the cream to drop into the jar from the mouth. Use a smaller filling nozzle so that the jars can be slid up over it. Then as the jars are filled they are backed away. Automatic machines are designed along these lines. Vibrating tables can be obtained or can easily be made but they are not worth their cost because correct filling eliminates the problem.

Potash Needed

We obtained a German formula calling for caustischer soda von grad 1.38 extrakt buchenholzasche. What the devil is this chemical? None of the dealers here ever heard of it. Baltimore.

Calling upon this department to display its knowledge of German is like hitting us when we are down. Our guess as to the above is that it is potash lye made from beechwood ashes of 1.38 gravity. You'd be better advised to use a pure commercial grade of potassium carbonate.

Sodium Hypochlorite

When is a solution of sodium hypochlorite most effective from an antiseptic point of view? Indianapolis.

Sodium hypochlorite solutions should contain between 0.45 and 0.5 per cent of available chlorine. On the one hand the solution if it is below the indicated amount it may be too weak, while above that amount it is likely to be too caustic.

Creams Smart

We attach herewith three of our cream formulas with all of which we have had complaints of smarting. Can you tell us of whether there is any ingredient that will cause such a reaction in them? This is the second time we have asked for aid from your department and got excellent advice. We hope you will assist us again. Cleveland.

And inspection for the three formulas (a cleansing and two tissue creams) reveals nothing which could possibly cause smarting. We think this is an essential oil problem and advise that you consult your perfume supplier.

Antiseptics

Have you any information concerning the development of new antiseptics of high phenol-coefficient when used in an alkaline aqueous solution? We are interested in products of this nature and wonder if you will put us into touch with manufacturers of such materials. Rochester, N. Y.

Exceedingly few antiseptics work well in alkaline media. The only one we can think of which will give reasonably good results in an alkaline solution is para amyl meta cresol. But the solution must be very weakly alkaline or the effectiveness of this, too, will be destroyed. The mercurials, such as potassium mercuric iodide, give best results in alkaline solutions.

In regard to antiseptics in general there is as yet nothing which can be called a universal antiseptic. The effectiveness of any antiseptic depends upon the nature of the vehicle containing it; the conditions under which it will be used; the character and concentration of bacteria in the infected area; the length of time it will remain in contact with the bacteria, etc. The search for a universal antiseptic which will be uniformly effective under any and all conditions is like the search for the philosopher's stone or

QUESTIONS

individuals cannot be considered. This service is limited to the trade only.

the search for a universal solvent—it is fascinating and challenging and probably hopeless.

Profits

We are manufacturers of flavoring extracts and a miscellaneous line of household products. In order to expand our activities we decided to add a line of household remedies which could be sold on a basis of house to house. Pharmaceuticals seemed to us to be more profitable in view of the fierce competition in the cosmetic market. What we would like to know in connection with the studies we are making is: Are pharmaceuticals as profitable as cosmetics and how can we tell what are the best numbers to sell? We note the variety of information contained in your valuable magazine and as new subscribers we would appreciate any assistance you can give us. Milwaukee.

Pharmaceuticals, as a rule, are more profitable than cosmetics by a considerable margin. This is due to the fact that, while raw material costs are about the same, packaging, distribution and advertising costs are much less per unit of sale in the case of pharmaceuticals than is the case with cosmetics. Of course the potential profit of a pharmaceutical line will depend upon the judgment with which items are selected. Profits on common items like milk of magnesia, mineral oil, cod liver oil, tooth paste, bicarbonate of soda, epsom salt, aspirin tablets and the like depend upon volume because unit sales prices are low in relation to production costs. And besides there is the powerful competition of standard brands to be reckoned with.

The best procedure in selecting a pharmaceutical line is to make a list of common ailments which will respond to self medication such as colds, constipation, cuts, bruises, headaches, indigestion, etc. Then out of this lengthy list select the ailments which are universal in that they are not influenced by sex, age nor season (laxatives for instance). With this information as a basis, retain a competent consultant who is familiar with the industry and its problems and also with government regulations, and have him develop some new products for you. It is one thing to sell just another laxative tablet, but it is much easier to sell one with an original appeal. Advertising men call this appeal a "copy hook." Try to obtain at any cost one unusually good item, upon which to build your business. You will find upon investigation of the history of the great proprietary houses that their progress is due to the original impetus given by one exceptionally good product.

Horse Powders

Can you give us some advice in regard to powders for horse conditioning? We have a good laboratory here but we would appreciate some outside pointers on how to make up such powders. Boise, Idaho.

Conditioning powders may be made with powdered cinchona, sulphur, sodium sulphate, potassium nitrate, powdered gentian, powdered fenugreek, liquorice, ginger, black antimony, charcoal, exicated ferrous sulphate. A typical mixture follows: sulphur 4 parts, gentian 4 parts, potassium nitrate 1 part, sodium sulphate 2 parts, fenugreek 1 part, liquorice 4 parts. The dose is a tablespoon mixed with food.

Oily Nail Removers

Will you kindly inform us what in your opinion is the composition of so called oily nail removers. These products are said to be used to remove nail polish and leave the nails free from the drying action of ordinary solvents. Chicago.

All the oily nail enamel removers we have seen have been mixtures of low boiling point solvents such as ether, acetone, alcohol with a small percentage of oil added, presumably castor. In one or two we noticed traces of amyl acetate. We don't know enough about them to offer an opinion as to whether they really do prevent hardening of the nails. We should think, that since so many women are buying straight acetone in drug stores instead of branded removers, that one good effect of oily solvents would be to persuade many lost customers to return to the fold.

What Code?

We manufacture a varied line of drugs and cosmetics and we are puzzled as to what code of the NRA we should work under. We are required to file our prices with some code authority. Which one shall it be, or should we file all our prices with all the code authorities which have jurisdiction over any of our products? New York.

If you make any product which comes under any code authority you must work under that code authority. If the products which you make come under several code authorities you must work under them all but only so far as each code authority affects you. In other words, prices for such medicines as you package in a unit which is sold to the public and which carry directions for use must be filed with the Package Medicine Code Authority. Prices for dentifrices, mouth washes, tooth pastes, and tooth powders likewise must be filed with the Package Medicine Code Authority. Prices on such cosmetics and perfumes as you market must be filed with the Cosmetic Code Authority, and prices on such pharmaceuticals, medicines, and biologicals as you sell for use on prescription must be filed with the Pharmaceutical and Biological Industry Code Authority. The distinction between package medicines and pharmaceuticals is that packaged medicines are sold over the counter in the manufacturer's package, whereas pharmaceuticals are either broken down into smaller lots by the druggist on prescriptions, or they are disguised by the druggist with a prescription label. In addition, directions for the use of pharmaceuticals are supplied by the physician. Beside these codes, you might be required to work under the Soap Industry Code Authority if you market a shaving cream. Since the fair trade practices of these several codes vary, you must be guided by the fair trade practices of the code applying to each particular product.

Discounts

We are about to offer a new drug specialty to the trade and are not certain as to what discounts to allow to the various types of distributors. Will you kindly let us know the usual discounts, and whether there are any variations from these in common use by good houses? Hartford.

The discounts granted are generally 33 1/3 per cent off the list price for the retail druggist. The wholesaler gets 15 per cent off the selling price to the druggist. Or another way of putting it is to say that the wholesaler gets 15 per cent off your list selling price, and the product is priced to the public so as to permit the druggist a 50 per cent mark-up. Some large houses vary from these figures, particularly those houses who are interested in selling the retailer direct. Some houses grant 40 per cent to the retailer when selling direct. Other houses grant the same terms to the retailer as they do to the wholesaler if the quantities purchased are the same. Naturally only the larger retailers can take advantage of these terms. We believe that you should be guided entirely by conditions surrounding your product. If it is wise to grant the retailer a longer discount in order to introduce the product, this should be done. We doubt if you will be able to get many wholesalers to stock your product unless you have first built up a demand from the retailer.

As Your Consultants—

We recommend the adoption of one of the following odor-complexes for your complete line of preparations. Careful consideration has been accorded each complex to insure not only its character but likewise its fixation and non-irritating effect.

Lilas Blanc	$10.00 the lb.
Locust P. No. 508	14.00 the lb.
Rose Flower A	10.00 the lb.
Fleur De Lis B	14.00 the lb.
Bouquet P. No. 4	12.00 the lb.
Bouquet No. 51028	9.50 the lb.
Honeysuckle No. 16	12.00 the lb.
Bouquet P. No. 525	15.00 the lb.
Orchidee Imported New	16.00 the lb.

We feel that our years of experience as counsellors qualify us to offer suggestions relative to both your manufacturing and perfuming problems. Your inquiries are solicited.

Compagnie Parento, Inc.

EXECUTIVE OFFICES AND LABORATORIES
CROTON-ON-HUDSON, N. Y.

NEW YORK
507 FIFTH AVENUE

TORONTO, ONT.
73 ADELAIDE ST., W.

THE COMPOUNDERS' CORNER

Incompatibility

In making any preparation—cosmetic, medicine, food, etc.—substances which will react with each other in an undesirable manner must not be used together. An example of this lies in the inclusion of both formaldehyde and hydrogen peroxide in preparations for treating sweaty feet; the aldehyde is oxidized to formic acid while the peroxide is reduced to water and the resulting mixture is useless for its intended purpose.

Mixtures of incompatibles may undergo a whole series of changes and some of the more important will be covered below.

Alkalies precipitate alkaloids. Therefore, a quinine hair lotion should not be prepared with potash, as is often suggested. Acids are neutralized by alkalies and rendered inactive. If a hair lotion containing salicylic acid is filtered through magnesia or magnesium carbonate to remove turbidity caused by perfume oils, inactive magnesium salicylate is formed. Alkalies liberate ammonia from ammonium salts; fats are saponified.

Acids neutralize alkalies, so that sodium bicarbonate and salicylic acid may not be used together in hair lotions. Salts of weak acids are decomposed by the addition of a stronger acid.

In some cases, insoluble chlorides or sulfates may be precipitated by using sulfates and chlorides, along with salts of certain heavy metals.

Explosions. Potassium chlorate, bromate or iodate must be handled and mixed carefully since sensitive mixtures are formed with iodine, phosphorus, reduced metal powders (reduced iron), antimony sulfide, sulfur, carbon, hypophosphites, sugar, starch, tannin, phenol, salicylic acid, thymol, catechu, lycopodium, shellac, glycerine, alcohol, etc.

Ethereal oils give explosive mixtures with many compounds, e.g., with chronic acid and chromates, hypochlorites, iodine, nitric acid, sulfuric acid.

Chromic acid and chromates, as well as permanganates, are powerful oxidizing agents, to be mixed with organic compounds only with great care.

Some of the reactions are not at first obvious; thus, it is known that iodine and ammonia form the dangerously explosive nitrogen iodide, and salves have been made which contained iodine and mercury precipitate, the latter being mercuri-ammonium chloride.

Specific incompatibilities are as follows:

Ammonia forms hexamethylene tatramine with formaldehyde.

Borax forms precipitates with alkaloids, gums, alum.

Chloralhydrate (used in hair lotions) is decomposed by alkalies, ammonia, and borax and form liquid compounds with camphor, menthol, phenyl salicylate and thymol.

Albumin forms a soluble albuminate with alkalies and is precipitated by acids, alcohol, tannin, metal salts and gums.

Tannic acid is discolored by alkalies and iron salts (ink formation), precipitated by alkaloids and metallic salts and will explode with chromic acid, potassium chlorate, potassium permanganate and picric acid.

Gum arabic discolors mixtures containing phenol, pyrogallol, naphthol, thymol.

Camphor forms liquid mixtures with phenol, chloral hydrate, naphthol, resorcinol, menthol, salol, and thymol.

Menthol acts like camphor. In addition, its odor is altered by peroxides.

Sodium perborate generates hydrogen peroxide in the presence of acids.

Resorcinol acts like camphor. It also forms colored compounds very easily, particularly in ammoniacal madis and when the resorcinol is impure.

Salicylic acid discolors with iron salts and with naphthol and alkaloids, except morphine and codeine, forms a precipitate.

Finally, the equipment itself must be examined to see that its material is not incompatible with the mixture being made.

Inorganic Jellies for Cosmetics

Silicic acid jelly is the most notable material of this type. It is made by a special process and contains 80 to 90% water which may be replaced by alcohol. Jellies of this type serve as the base for special tooth pastes and skin-creams.

Various metallic hydroxides also give jelly materials, especially magnesium, aluminum, and zinc hydroxides. Aluminum hydroxide particularly, forms a paste from which water cannot be easily pressed; it has the appearance of white vaseline and a consistency approximately like that of several per cent of sodium stearate in alcohol. It is transparent and invisible when rubbed on the skin. Its use is thus indicated where vaseline and other fatty substances (such as stearine) are not desirable, as in absolutely fat-free skin creams. Most medical and cosmetic additions form compatible mixtures with the jelly, this is particularly true for insoluble materials. Organic colloids also harmonize well with the jelly. Union of organic and inorganic colloids allows the extensive imitation of secret specialties.

Inorganic jellies which have been deprived of only part of their original liquid, can absorb a certain amount of liquid; when drying continues until the metallic hydroxide is deprived of free water, direct jelly formation is no longer possible. The resulting powder has colloid properties, however, such as small particle-size and strong absorptive power. Thus, silicic acid and titanium dioxide may be used in cleansing creams, tooth pastes and other preparations (including soap). Furthermore, they improve the consistency of the paste since they bind a large proportion of liquid; 1 to 2% addition is sufficient.

Liquid Powder

Liquid powders considered here are combinations of a cream type and powder type to make an improved powder. Usual powders have the disadvantage not only of clogging the pores, but also of being difficult to remove from the pores. Powder mixed with cream, however, first adheres better, next penetrates the pores with difficulty, and, finally, is completely and easily removed from the skin. Apparently the same result could be obtained by simply using a cream before applying the powder, but in many cases it is extremely difficult to make the powder adhere well with such treatment.

In making the liquid powder, a good vanishing cream should be used; or a diglycol stearate and a glycerine monlstearate cream may be employed. It must be remembered, for example, that carbonates should not be mixed with a cream containing free stearic acid, nor zinc oxide with one made from glycerine monostearate. Satisfactory powder bases are colloidal kaolin, talcum, titanium dioxide, amorphous silicic acid, magnesium stearate, etc.

Two different liquid powders are prepared as follows: 1. Heat 10 parts of digylcol stearate and 60 parts of water to 65° C., stir until cold, allow to stand over night and then add 3 parts of titanium dioxide (or 2 parts of titanium oxide, 1 part of purified talcum, and dyestuff). 2. Heat on the water-bath 12 parts of glycerine monostearate, 12 parts of liquid paraffin and 50 parts of distilled water. Stir until the mass is homogeneous and then add 2 parts of titanium dioxide, 1 part of purified talcum and 23 parts of

distilled water. Cooling to 35° C. gives the desired liquid powder.

The coloring material used is preferably a concentrated dye solution precipitated upon (not mixed with) a color adsorbing substances such as colloidal kaolin or titanium-dioxide; it will not lose its color when acted upon by a liquid solvent.

The actual powder content of the liquid powder in general may not exceed 5%; the perfume, which must not contain vanillin, may be added while the cream and the powder base are being incorporated with each other.

Dry Shampoos

Since it is often detrimental to wash hair, dry shampoos are used to remove oil from the hair surface. The powder is dusted upon the hair in any suitable manner and then removed by means of a brush. A primary requirement of the product is that it remove the oils, but not adhere too firmly to the hair. The powder must thus be spongy and be easily brushed out of the hair.

The effect of the dry sahmpoo is primarily physical and may be likened to tooth powder. Shampoo powder adsorbs hair oil and carries it away when brushed out. Without thorough brushing, the hair appears grey and scale formation increases.

Most dry shampoos consist predominantly of starch in mixture with borax and sodium bicarbonate. The starch must be freed from fat as much as possible; other materials used are white Bolus, fat-free orris root powder, finely powdered silica gel, powdered disodium phosphate, the powdered fusion product of trisodium phosphate and silica gel, crystalline trisodium phosphate and ammonia-soda. The last should be avoided in quality products.

Manufacture is simple, consisting of mixing the individual ingredients, perfuming (it is best to perfume only part of the powder) and sieving. Perfume addition to the extent of 0.5%. Hygroscopic substances must be avoided. Boric acid is sometimes used.

Formulas are: 1. 94% rice starch, fat-free, 1% sodium bicarbonate, 5% powdered borax; 2. 90% fat-free starch, 5% powdered borax, 5% silica gel; 3. 20% pulverized silica gel, 75% fat-free starch, 5% powdered trisodium phosphate; 4. 10% fat-free orris-root powder, 80% fat-free starch, 5% powdered borax, 5% sodium bicarbonate.

Sun-tan Cream

If the skin is rubbed with a fatty oil before exposure to sunlight, it will turn brown without burning. The following mixture is recommended: 200 g. olive oil, 400 g. peanut oil, 200 g. vaseline oil. Dissolve 2% Esculin in this mixture. Use bergamot oil for perfuming, since this promotes tanning. To convert the preparation into a cream add some cetaceum and paraffin until the mass is of the consistency of brilliantine. The use of pyrogallol, recommended by many, should be undertaken with care, since it may irritate the skin.

Hydrogen Peroxide in Mixtures

Hydrogen peroxide is often used for disinfecting purposes in conjunction with other products. Their selection should be considered from the practical viewpoint of their possible effect on hydrogen peroxide and their ability to increase or decrease its bactericidal action. Materials which do not have a damaging effect but rather have an accelerating influence on its disinfecting power are boric acid, benzoic acid, phosphoric acid and basic aluminum acetate. All of these materials are in themselves disinfectants, so that the resulting effect in conjunction with hydrogen peroxide is of particular interest.

In admixture with phosphoric, benzoic and boric acids hydrogen peroxide was found to exhibit excellent stability after eight weeks of observation. Mixtures with basic aluminum acetate however show only slight stability. Mixtures of hydrogen peroxide with phosphoric and benzoic acids show a bactericidal action in concentrations at which each component by itself is inactive. Mixtures of hydrogen peroxide with ointment bases show as good bactericidal action after two months as is shown by its aqueous solution.

Detection of Para-Phenylenediamine in Hair Dyes

It is important to determine if para-phenylenediamine is present in hair dyes in admixture with other diamines such as for instance, para-diaminoanisole and para-toluylenediamine. Since the well-known ferric chloride reaction of p-diaminoanisole is masked by the presence of p-toluylenediamine and the behavior of p-diaminoanisole and p-phenylenediamine toward the vanillin-hydro-chloric acid reagent shows practically the same reaction, it becomes necessary in order to detect p-phenylenediamine in the presence of these other diamines to convert it first into the dichlor-di-imine by treatment with hypochlorite.

If the hair dye is first treated with hypochlorite the diamines are converted into dichlor-di-imines from which the di-imine derived from para-phenylene diamine may be separated and purified by a crystallization from alcohol. When the vanillin-hydrochloric acid reaction is now applied to the quinonedichlor-di-imine (from para-phenylenediamine) the greenish-yellow coloration first formed gradually changes to brick-red with formation of a precipitate. With methylquinone-dichlor-di-imine (from para-toluylenediamine) a persistent and lasting greenish-yellow color is formed by the same reagent.

Sterile, Antiseptic Powders

The preparation of sterile, antiseptic and disinfecting powders are made by incorporating the esters of para-oxybenzoic acid with powder forming materials. The mixture is subsequently heated in a closed vessel at temperatures which cause sublimation of the antiseptic material into the base material. It is then allowed to cool out of contact with the outside air. By this process an increase of the bactericidal action is effected as distinguished from the effect produced by a simple mechanical mixing of the ingredients without the application of heat.

For the preparation of a powder for smoothing and sterilizing the hands one mixes 2 parts of methyl para-oxybenzoate with 98 parts boric acid, puts the mixture in a closed vessel and heats it in an oven for one hour at 70° C. It is then allowed to cool in the closed vessel, so that the sublimed ester does not escape.

For the preparation of a dusting powder one heats a mixture of 1 part ethyl meta-chlorpara-oxybenzoate, 1 part propyl para-oxybenzoate and 98 parts zinc oxide for an hour at 130° C. in the same manner as above.

For the preparation of a foot powder one heats a mixture of 2 parts methyl para-oxybenzoate, 1 part ethyl para-oxybenzoate and 97 parts bole or talcum for an hour at 100° C. as above.

The various mixtures containing the esters of para-oxybenzoic acid are heated at temperatures which are not high enough to melt them but should be sufficient to cause sublimation, so that the base material is permeated with the sublimed ester. In the case of boric acid the heating must be carried out below 75° C., because at this temperature it changes over into meta-boric acid. With other powder forming materials higher temperatures may be applied.

Reference: German Patent 592826.

Tannic Acid Tablets

The production of good tablets consisting chiefly of gallotannic is difficult, as the amount of diluent is restricted. Tannin itself adheres to the die, aqueous liquids give a sticky mass which could not be granulated while organic solvents moisten satisfactorily but the resulting granules fall to a powder after drying. Simple syrup or acacia mucilage has been found the most satisfactory. Boric acid, added to the granules after drying is a good lubricant. Mix 25 grains mercuric chloride with 2 oz. tannic acid and triturate with about 180 minims syrup or mucilage. Dry and press through a No. 16 sieve. Add 300 gr. boric acid and 200 gr. lactose to make 100 tablets, each weighing 15 gr., and compress lightly. Tablets are of a pale buff color, firm and easily crushed. They are readily soluble in warm water to give an almost clear solution.

(Continued on page 677)

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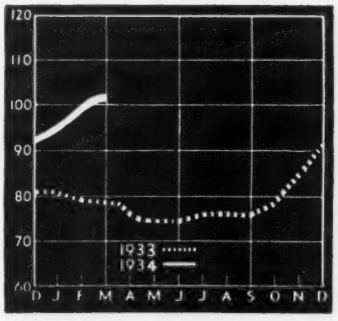
ALCOHOL NEWS

JUNE ★ A Monthly Series of Technical Articles for Chemists and Executives ★ 1934

ETHYL ALCOHOL PRODUCTION



(moving twelve-month averages, 1931=100)

			1934	1933
PRODUCTION				
1000 proof gals.	Jan.-March		39,879	23,327
	March		12,313	8,229
	Feb.		13,810	9,084
SALES				
1000 proof gals.	Jan.-March		33,887	22,427
	March		11,464	7,751
	Feb.		10,867	7,498

ALCOHOL MARKET QUIET

New developments were lacking in the alcohol market and price situation during the past month. The price structure maintained a firm tone and while the demand was relatively light, both production and sales of ethyl alcohol continued well above comparable statistics for last year.

Seasonal slowing up of general consuming industries as well as the let-up in the demand from the anti-freeze trade have been the chief causes for the slight leveling out of the production trend.

SYNTHETIC PERFUME AND FLAVOR PRODUCTION GAINING IN U. S.

American manufacturers continue to make progress in the production of artificial flavors and perfumes, a large proportion of which is composed of synthetic aromatic chemicals, produced from coal tar. At the rate progress is now being made, it may not be long before the United States will be independent of foreign sources for these important commodities, according to a recent report from the Chemical Division of the U. S. Bureau of Foreign and Domestic Commerce.

The downward trend in imports of flavors and perfume materials of coal tar origin, apparent in 1933, is continuing in 1934. During the first three months of this year the dollar value of imports was only $13,383 compared with $18,247 for the first quarter of 1933 and $41,220 for the corresponding period in 1932.

A large demand for synthetic aromatic chemicals is supplied by manufacturers of soaps, toiletries, pharmaceuticals, foods, beverages, insecticides, disinfectants, deodorants, etc. Lately, synthetic perfumes are said to have found use in building a sales appeal in silk hose, lingerie, and other items of apparel.

SUPPRESSION OF BACTERIAL CONTAMINATION IN MAKING HIGH QUALITY ETHYL ALCOHOL

Proper Treatment Essential to Both Quality and Yield; Understanding of Problem Leads to Appreciation of "Quality" Product

In the production of all ethyl alcohol of the high quality and uniformity as that required of all plants of the U. S. Industrial Alcohol Co., the control of bacterial contamination is one of the most important steps in the entire process. Proper solution of this problem is absolutely essential because faulty fermentation not only affects the yield but the quality as well.

No amount of redistillation and purification will compensate for inadequate control and supervision of this vital factor in the production of "quality" spirits.

From the following brief discussion of the problem, a greater appreciation may be gained for the "quality" product as such, and of the care and precautions taken to insure entire production of the highest grade and degree of uniformity.

In the design of an alcohol plant, it is necessary to keep in mind that conditions favoring the growth requirements of the yeast used in alcoholic fermentation also favor the growth of bacteria which adversely influence the fermentation process for the production of ethyl alcohol, both as to quality and yield. Special precautions, therefore, must be taken to exclude these bacteria as far as possible and at the same time favor vigorous yeast fermentation.

In nature, three outstanding natural bacterial fermentations occur, namely lactic, acetic and butyric. It is the bacteria initiating these types of fermentation which must be excluded from the alcoholic yeast fermentation in a distillery. The butyric bacteria present a special problem in that a portion of their life cycle includes a spore stage which is particularly resistant to heat or antiseptics which may be used to combat them.

Fortunately, it has been found that by

(Continued on next page)

ALCOHOL IN VITAMIN EXTRACTION

The importance and utility of alcohol in practical research is again emphasized by its use in connection with vitamin extraction work now under way at the Basic Science Research Laboratory at the University of Cincinnati.

Considerable work is being done on the preparation of vitamin B_1 from yeast. A number of methods of extraction — some involving the use of large quantities of alcohol—have been developed which lead to products of high potency.

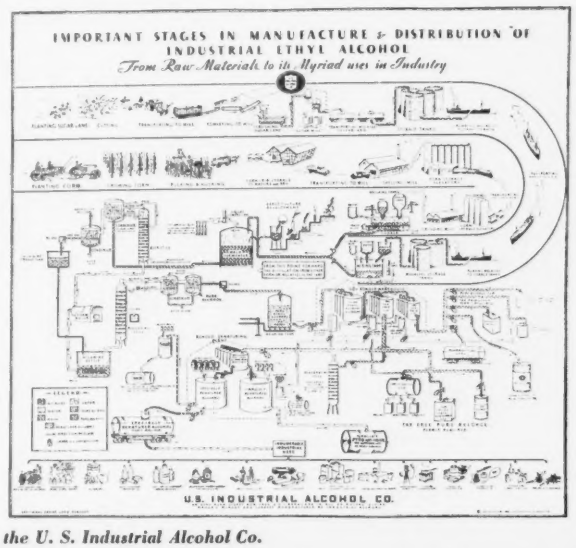
Vitamin B_1 is the anti-polyneuritic vitamin and is essential to humans for proper appetite and growth. The problem is to prepare the vitamin in a pure crystalline form so that it can be dispensed as a standard preparation of known potency.

Ultra-violet absorption spectra are employed in studying the chemical structure of this vitamin. Up to the present results indicate that the vitamin is probably a modified purine or pyrimidine; possibly a pentoside of cytosine — a pyrimidine found in the nuclei of all living cells.

* * *

As a soap preservative, sodium thiosulfate offers several advantages over sodium sulfite, in being readily soluble, free from a tendency to form lumps, and odorless. However, its readiness to part with an atom of sulfur and reduce to sulfite must be guarded against. This happens under many conditions: in solution, in the presence of air, acid, metals, etc.

Production of Ethyl Alcohol, from raw materials to industrial application, is graphically illustrated by this flow-chart, prepared by the U. S. Industrial Alcohol Co. Beginning in the cane and corn fields; through detailed fermentation and distillation operations; through the government warehouses and denaturing plants the alcohol is traced to its ultimate industrial uses. Attractively finished copies of this chart, 19" x 21", are available for distribution to interested parties.


IMPORTANT STAGES IN MANUFACTURE & DISTRIBUTION OF INDUSTRIAL ETHYL ALCOHOL
From Raw Materials to its Myriad uses in Industry
U.S. INDUSTRIAL ALCOHOL CO.

Published Monthly by the U. S. Industrial Alcohol Co.

THE USE OF VEGETABLE JUICES IN COSMETICS

While plant and vegetable juices have long been used in medicine, their possible use in cosmetics has been largely overlooked by manufacturers, according to a recent statement by a German authority. Reference is made, not to the essential oils, but to the chemical ingredients of the juices themselves, which have therapeutic value when applied externally to the skin. Sulfur, to name a single example, is found in the juice of beans, nettles, water-cress, coltsfoot, garlic, dandelions, radish, yarrow, ribwort and onions. Similarly, lime, potash, phosphates, albumen, phosphorus, chlorine, vitamines, etc., are found in various other vegetable juices.

BACTERIAL CONTROL IN "QUALITY" ALCOHOL

(Continued from preceding page)

regulating the pH or hydrogen ion concentration of the fermentation mashes, a point may be found which is optimum for yeast but which inhibits the growth of the spore forming butyric bacteria. The acetic types are markedly aerobic, i.e. require free oxygen and since a yeast fermentation soon becomes anaerobic, these forms may be suppressed.

The growth of the lactic types, and also of the other two, are largely controlled by resorting to the use of steam sterilization of pipe lines and fermentation vessels. The air used for agitation of mashes is also filtered to remove infecting micro-organisms.

Equipment Design Important

The design of an alcohol plant must be such as to eliminate "dead-ends" or places where pockets of mash may remain to become infected and escape sterilization. Such pockets act as infecting seed, and initiate growth of undesired or harmful bacteria in mashes which have been perfectly sterilized, thus undoing all the precautions which have been taken in their preparation.

Thus, much of the control work in a fermentation process has to do with the skillful application of bacteriological procedures which are known to favor the production of vigorous pure strains of yeast and at the same time exclude or weaken the types of infecting bacteria which are always present.

The importance of the proper handling of this delicate problem cannot be over emphasized. The work done in the research and control laboratories and the rigid supervision and careful sterilization carried out in the plants have all contributed to the enviable reputation of the U. S. Industrial Alcohol Co. for the consistent production of ethyl alcohol of the highest quality and uniformity.

USES OF ALCOHOL IN INDUSTRY— No. 13

ALCOHOL—AN ESSENTIAL CHEMICAL IN OUR DAILY LIFE

So wide-spread and diversified are the applications of alcohol to the comfort, covenience and health of the individual, that this all-important commodity ranks among the most essential raw materials of our modern civilization. Within the last quarter century, its production has steadily increased reaching in 1933, a figure approaching 100,000,000 gallons—all of which is devoted to industrial and medical needs.

Health: The preservation and restoration of health is essential to public welfare. Hospitals employ alcohol or alcohol derived materials in many ways of which anesthesia, surgery, antiseptics and research are outstanding illustrations.

Countless medicines and remedies contain alcohol as a necessary ingredient. Many medicines, drugs and pharmaceuticals, while not containing alcohol, have required it in the preparation of the active principles.

National Defense: Alcohol is a most important arm in warfare. Nearly all explosives, propellants and poison gases are closely associated with alcohol in their manufacture. Likewise, many accessories of war from the "bank indicator" of the airplane to the tin of "canned heat" are typical of the role alcohol plays in National Defense.

Comfort and Convenience: No hard and fast line can be drawn between these terms—and alcohol contributes immeasurably to all the things which make life pleasurable and worth living. The vast systems of communications owe their functioning to electrical equipment in which alcohol plays a part. The myriad motor cars which crowd the highways testify to the use of alcohol in their manufacture. The home with its many furnishings and those of the individual—all have employed alcohol somewhere along the line of their development or fabrication.

Beauty Aids and Cosmetics: Personal charm, cleanliness and attractiveness are today indebted to cosmetics, perfumes and other more essential aids to personal health as dentifrices, soaps, disinfectants, etc. all of which contain alcohol.

Thus it will be seen that a normal life, from necessities to luxuries is bound up in the story of alcohol.

TECHNICAL DEVELOPMENTS

A concentrated hair wave lotion has been introduced abroad consisting of gum karaya; aquaresin G. M. and alcohol together with perfume and coloring. It is diluted with water before using.

* * *

To encourage the use of alcohol, (a home product) as a motor fuel in Brazil, police authorities are said to be reducing fines for traffic violations if the offender is using an alcohol motor fuel. Alcohol is also reported to be used as a fuel in street lamps in Argentina.

* * *

A new principle has been used in making shaving soaps by a Hungarian inventor. According to his process, a reaction between an alkali and an ammonium soap is allowed to take place on the face—with water acting as a necessary catalyzer. This reaction is said to aid materially in the softening of the toughest beard.

* * *

A small amount of Polyglycol is said to be useful as an ingredient in alcoholic perfume compositions for use in cosmetics. It is claimed that the Polyglycol helps to prevent separation of the components.

* * *

A new type water-still of 3 gallons per hour capacity is now offered with several improvements for laboratory or commercial use. It has a Pyrex glass cover to permit observation and facilitate cleaning; a triple vapor baffle; and a "flushout" which minimizes the concentration of impurities in the boiling chamber.

* * *

A new pellet mill is said to compress a variety of loose materials, such as mineral powders, dry feed, dehydrated charcoal, etc., into firm shapes without the use of a binder. Results are accomplished by placing the material under very high pressure and subjecting it to a twisting action.

* * *

Hygrometers enclosed in Cellophane, according to experiments conducted in Germany, give the same readings as those that are not, due to the fact that Cellophane is permeable to moisture and reacts quickly to changes in humidity. It is suggested that where the ordinary hygrometer is rapidly corroded or rendered useless by dust, its usefulness is preserved if it is enclosed in a Cellophane sheath.

* * *

A new **cleaning and polishing fluid** has been developed for use on chrome finishes, particularly on automobiles. Great speed and ease of application are claimed for the product, which not only polishes the chrome surface but also effectively removes rust and discoloration.

* * *

One of the principal ingredients of a **new dental preparation** is bentonite, said to lend desirable detergent, curative and cleansing properties to the product. Among the other ingredients are magnesium oxide, sodium fluoride, sodium phosphate, oil of eucalyptus, gum camphor and benzoin.

* * *

Ethylene gas has been reported to offer an effective medium for removing from walnuts their outer husks when the latter have failed to crack normally.

* * *

Aluminum and other metal powders may be used in the manufacture of floating soaps. Both a lightening and a bleaching effect are obtained from the evolved hydrogen when the metal acts on the alkali present. From 20 to 30 gm. are used for 100 kgm. of soap.

U.S. INDUSTRIAL ALCOHOL CO.

WORLD'S LARGEST PRODUCERS OF INDUSTRIAL ALCOHOL

ETHYL ALCOHOL

SPECIALLY DENATURED-*All Formulas* • COMPLETELY DENATURED-*All Formulas* • ANHYDROUS-*Denatured* • ABSOLUTE-*Pure*

SOLOX-*The General Solvent* • PYRO-*The Standard Anti-Freeze*

PURE (190 PROOF) TAX PAID — TAX FREE

U. S. I.—U. S. P.-*Ethyl* • WEBB'S-*Ethyl* • SUNSHINE-*Ethyl*

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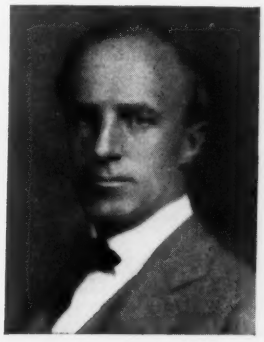
NEWS

Proprietary Advertising Committee

The Proprietary Association has appointed the following committee to take up study of advertising conditions for the purpose of constructing a plan of control:

W. Y. PRYOR

CARL N. ANGST



C. W. DUNN

William Y. Pryor, vice-president of Vick Chemical Co., chairman; Lee H. Bristol, vice-president, Bristol-Myers Co.; and William S. Groom, general manager, Thompson-Koch Co.

Medicine Mfrs. Institute to Control Ads.

Resolutions requiring members of the Institute of Medicine Manufacturers to subscribe to strict standards of product and advertising censorship were adopted at the annual meeting of the Board of Governors of the Institute, held at the Waldorf Astoria, New York City, on May 22.

The following officers were elected: president, Dwight E. Austin, Thos. Leeming Co., New York; vice-presidents, Chas. H. Pinkham, Lydia E. Pinkham Medicine Co., Lynn, Mass.; Frank G. Hall, Murine Company, Chicago; Warren W. Burgess, Knox Co., Kansas City, and George Fontaine, Chattanooga Medicine Co., Chattanooga; secretary, Wm. W. Holloway, Johnson Holloway Co., Philadelphia; treasurer, T. S. Strong, Strong-Cobb & Co., Cleveland; executive manager, Wm. P. Jacobs, Clinton, S. C.

Manufacturing Chemists Meet

Manufacturing Chemists Association held its sixty-second annual convention at Skytop, Pa., June 8. The following officers were elected: president, W. B. Bell, of the American Cyanamid Company, New York; vice-presidents, E. M. Allen, of the Mathieson Alkali Works, New York, and George W. Merck, of Merck & Co., New York; treasurer, J. W. McLaughlin, of the Carbide & Carbon Chemicals Corporation, New York; secretary, Warren N. Watson, 608 Woodward building, Washington.

A. P. M. A. at Chatham

American Pharmaceutical Manufacturers' Association has announced the following program for the annual meeting at the Chatham Bars Inn, Chatham, Mass., June 25-28.

Monday, June 25, 1934, 9.30 A. M.—Opening of session by president C. N. Angst; Report of Committee on Annual and Semi-Annual Meetings, H. B. Johnson, chairman; Report of Committee on Attendance, S. B. Penick, Jr., chairman; Report of Membership Committee, Carroll Dunham Smith, Sr., chairman; Reception of Delegates and Guests from other Associations; Report of Memorial Committee, B. L. Maltbie, chairman; Report of Delegates to National Drug Trade Conference, Harry Noonan, chairman; Report of Entertainment Committee, J. A. Berninghaus, chairman; Appointment of Auditing, Nominating and Resolutions Committees; Report of secretary; Report of treasurer; Address of president.

Tuesday, June 26, 1934, 9.15 A. M.—Report of Legislative Committee, S. W. Fraser, chairman; Address—"Revision of Federal Food and Drugs Act," Charles Wesley Dunn; Report of Code Committee, J. G. Searle, chairman; Report of Committee on Industry and Business Policy, S. DeWitt Clough, chairman; Report of Committee on Costs and Cost Finding Methods, Eliot S. Frosst, chairman; "Labor Costs", Carroll Dunham Smith, Jr.; "Material Costs," H. Richard Noonan; "Manufacturing Overhead", W. S. Lister; "Distribution Overhead", R. W. Weed; Report of Committee on Special Association Services rendered by Messrs. Connor, Klemtner and Sage, Harry Noonan, chairman.

Wednesday, June 27, 1934, 9.15 A. M.—Report of Committee on Sales Promotion and Advertising, Lansing Chapman, chairman; "Two Great Principles of Profitable Advertising" and "The Economic Effect of Unbalanced Price Relations on the Pharmaceutical Business," A. W. Rucker, president, Eddy-Rucker-Nickels Co.; Report of Committee on Credits and Collections, Frank Schopflin, chairman; Report of Employer-Employee Relations Committee, H. Sheridan Baketel, chairman.

Thursday, June 28, 1934, 9.15 A. M.—Report of Committee on Sales Problems, R. N. Fullerton, chairman; "Incentive Compensation Plans for Salesmen," Carle M. Bigelow; "Equipping and Stimulating Salesmen," M. J. Brown; "Capitalizing your Market," C. F. Price, vice-president and chairman of General Sales Com., Remington Rand, Inc.; "Time Control and Field Supervision of Salesmen," Robert N. Fullerton; Report of auditing committee; Report of resolutions committee; Report of nominating committee; Election and Installation of Officers.

A. D. M. A. to Hot Springs

The American Drug Manufacturers' Association will hold its 1935 annual meeting at The Homestead, Hot Springs, Va., the week of May 6, 1935.

Insecticide & Disinfectant Meeting

National Association of Insecticide & Disinfectant Manufacturers held its annual midsummer meeting at the Edgewater Beach Hotel, Chicago, June 11, 12 and 13. Among the speakers were John Powell, Dr. Foster D. Snell, P. C. Magnus, Dr. H. D. Pease and Dr. George F. Reddish.

Wholesale Code Hearing

A revised wholesale drug code has been filed with the National Recovery Administration and set for public hearing June 25. This procedure will be followed because of the many changes made in the code since the former public hearing.

The new code is submitted by a sponsoring committee for the entire industry, rather than by the two wholesale drug associations, both of which have restrictions in their membership requirements.

The members of the committee are as follows:—R. E. Lee Williamson, chairman, Baltimore; Joseph Schneider, vice-

A SELECTIVE BASIS
for purchasing
NEUTRAL POWDERED SOAPS

No one soap can meet every need. Manufacturers of tooth paste, tooth powders, shampoos and lotions, require certain definite characteristics in their soaps according to their formulae and according to the requirements of their product.

As producers of the widest range of Neutral Powdered Soaps, we can duplicate exactly or furnish from standard production the exact soap characteristics you require.

POWCO BRAND Neutral Powdered Soaps are laboratory controlled for exact uniformity of chemical and physical characteristics.

Selection of refined edible oils by test and full production control safeguard **POWCO BRAND** Soaps against rancidity, hardness or discoloration.

We are equipped to give you the soap you require, at a price which means buying economy for you.

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LABORATORY CONTROLLED
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REG. U.S. PAT. OFF.

ARTISTRY AND QUALITY in QUINCE SEED BASE PRODUCTS

Discriminating women everywhere are agreed that an artistic fingerwave should also be a quality wave.

Quince Seed base hair waving lotions are distinctly quality products. They leave the hair soft and lustrous and are kind to the scalp.

POWCO BRAND Tested Persian Quince Seed gives you a maximum of clear mucilage—an economical basis upon which to produce a quality product.

Send for samples and compare.

CONCENTRATED SHAVING CREAM BASE

This product is a creation of our Chief Soap Chemist and removes all uncertainty from shaving cream manufacture.

Allow us to prove our claims for economy of production and efficiency of finished product by submitting sample and modus operandi.

JOHN POWELL & CO., Inc.
114 East 32nd Street, New York, N. Y.

chairman, Cincinnati Economy Drug Co.; Dr. E. L. Newcomb, secretary, New York; Ira J. Shapiro, treasurer, New York; George V. Doerr, McKesson-Minneapolis Drug Co., Minneapolis; H. D. Faxon, McKesson-Faxon Drug Co., Kansas City, Mo.; Harry Z. Krupp, Philadelphia Wholesale Drug Co., Philadelphia; A. K. Mayer, Kiefer-Stewart Co., Indianapolis; Joseph C. Miller, Miller Drug Sundry Co., Baltimore.

The code provides a basic work week of forty hours, with a provision against working more than eight hours in any twenty-four, or more than six days in any seven consecutive days. Overtime is to be paid at the rate of time and one-third and is to be limited to eight hours in one week except in periods of emergency. Watchmen are permitted to work fifty-six hours and maintenance and outside service employees forty-eight hours. Executives receiving $35 a week in cities of more than 500,000 population, and $30 in smaller cities are exempt from the hours limitations. Minimum wages are 37½ cents an hour in cities of more than 500,000, and 35 cents elsewhere, with differentials of $1 a week in the South, $2 for junior employees, and $1 for apprentices.

The code authority is to be composed of nine members elected by the trade, to which the Administrator may add two more if he finds that some section of the industry is not represented by the elected board. The election is to be from a panel of eighteen nominees approved by the Administrator. Voting may be cumulative, and votes will be proportionate to the number of employees. Not more than five members may be chosen from any one trade association.

People

Sam Dworkin—Editor

Sam Dworkin has been made associate editor of the publication, *Drug Store Retailing*, New York, according to an announcement of H. K. Stroud, the publisher of the periodical. He will act as liaison officer between the trade and the publication.

R. H. Bursch—Gair V. P.

R. H. Bursch has been appointed vice-president of Robert Gair Co., Inc., in which position he assumes complete charge of production and sales. He has been succeeded as executive vice-president and general manager of the container divisions by Lorin B. Miller.

Mathias—Sendol Sales Mgr.

W. H. Mathias has been appointed sales manager of the Sendol Co., Kansas City, according to an announcement by Helen F. Hogan, vice-president.

Brady and Round Quit McCoy

Curtis P. Brady, for the past ten years treasurer, director and general manager of McCoy's Laboratories, Inc., New York, and Howard Round, sales manager of that organization, have resigned from their connections with that company.

E. A. Newcomb Marries

E. Allen Newcomb, son of Dr. and Mrs. E. L. Newcomb, Montclair, N. J., was married June 3. His bride was Miss Catherine Purcell, East Milton, Mass. The young couple will reside in Indianapolis after July 1, where Mr. Newcomb will be associated with Eli Lilly & Co.

Gerald J. Muth Marries

Gerald J. Muth, son of Charles C. Muth, president of Muth Brothers & Co., wholesale druggist, Baltimore, will be married June 7 to Miss Mary Lee Carroll, daughter of Mrs. Charles Carroll and a descendant of Charles Carroll of Carrollton, one of the signers of the Declaration of Independence.

Joan Marie Hemingway

Mr. and Mrs. C. E. Hemingway have announced the birth of a daughter, Joan Marie, on Saturday, May 5. Mr. Hemingway is associated with the New England Collapsible Tube Co.

Dr. A. R. Bliss Talks

Dr. A. Richard Bliss, Jr., vice president and director of the research laboratories of The William A. Webster Co., and director

DR. A. RICHARD BLISS, JR.

of The Reelfoot Lake Biological Station, Reelfoot Lake, Tenn., delivered the Commencement Address on June 1, 1934, at the Eighty-Fourth Annual Commencement of the Cincinnati College of Pharmacy.

Eugene Barton Marries

Announcement was recently made of the marraige of Miss Joanne Irene Diell daughter of the late Mr. and Mrs. Samuel J. H. Diell of Winnipeg, Manitoba, to Mr. Eugene Crandall Barton, son of Mr. and Mrs. Eugene S. Barton of Croton-on-Hudson, New York.

The marriage was performed in the chapel of St. Ann's Anglican Church, Toronto, with the Rev. Dr. F. Noel Palmer, rector, officiating.

Mr. Barton is the secretary and general manager of Compagnie Parento of Canada, Toronto.

Penick—Vadsco Director

S. Barksdale Penick, president, S. B. Penick & Co., New York, has been elected

S. B. PENICK

a member of the board of directors of the Vadsco Sales Corp., New York.

Johnson Heads Zemmer

H. B. Johnson has been elected president and general manager of the Zemmer Co., Pittsburgh, succeeding the late Charles C. Doll. At the same meeting the board elected E. C. Berg as vice-president and K. P. McNulty as secretary and treasurer, the latter succeeding Mr. Berg as secretary. Mr. McNulty was also elected a director of the company to fill the vacancy caused by the death of Mr. Doll.

Kiefer Mayer Honored

A. Kiefer Mayer, first vice-president, Kiefer-Stewart Co., Indianapolis, wholesalers, has been awarded the degree of bachelor of science in pharmacy by the Indianapolis College of Pharmacy in recognition of his service to the drug industry and the pharmaceutical profession.

L. D. Johnson Heads Mead Johnson

Lambert D. Johnson has been elected president of Mead Johnson & Co., Evansville, Ind., to succeed his father, the late E. Mead Johnson.

Hole in One

Ted Strong of Strong, Cobb & Co., Cleveland, recently shot a hole in one with a No. 3 iron on the 200 yard, 13th hole at the Mayfield links, that city.

IN THE LAST ANALYSIS, THE SALES OF YOUR PRODUCT HINGE ON THE QUALITY OF ITS

BASIC INGREDIENTS

Almond Meal
Balsam Tolu
Benzoin Gum
Chalk (precipitated)
Chinese Shavings
Cuttle Fish Bone
FACTOLAC
Gum Arabic
Gum Tragacanth
HENNA
Henasoap Shampoo
Indian Gum (Karaya)
Talcum
Irish Moss
Lavender Flowers
Olibanum
Orris Root
Powdered White Soap

HOPKINS' NEUTRAL WHITE SOAP

Powdered, granulated. Contains NO soap bark, free alkali, free acid or heavy metals. Totally free of rosin, sugar and foreign matter.

QUINCE SEED

Choice qualities rich in mucilaginous content.

In your preparation, the chain of its ingredients is only as strong as its weakest link. Neither clever merchandising nor effective advertising can replace the product's job of "delivering the goods." For more than 40 years, America's outstanding toiletry successes have relied on Hopkins' Basic Ingredients for the tested, full-strength, true-to-name quality which has helped elevate them to their present position of leadership.

FREE ON REQUEST

SAMPLES, PRICES and PRICE LISTS OF HOPKINS' CRUDE BOTANICAL DRUGS and LABORATORY BASIC SPECIALTIES

"Quality is remembered long after price is forgotten"

J. L. HOPKINS & COMPANY 220 Broadway NEW YORK

SINCE 1898

We have been specializing exclusively in Blended Perfume Oils, ready to use in making perfumes, toilet waters, powders, creams, etc. We recommend two of our best known specialties.

■

ROSE "E" . . $25.00 per pound

For thirty years the standard for creams, no finer nor truer Rose Oil obtainable.

■

LILAC SPECIAL . $9.00 per pound

A thoroughly satisfactory oil for creams, imparting the fresh, flowery Lilac perfume.

■

Evergreen Chemical Co. Inc.
160 Fifth Avenue :-: New York
Established 1898

STEARATES

ZINC STEARATE
CALCIUM STEARATE
ALUMINUM STEARATE
MAGNESIUM STEARATE

Stearate of Magnesia
Light. Great Adhesiveness. Pure White. Immeasurable Fineness. Heavy if desired Dusts out under the puff like the finest pollen

Stearate of Zinc
Odorless. Impalpable. Pure White. Water Resisting. Great Adhesiveness. Light or Heavy as desired.

We are manufacturing the foregoing on a large scale. Deliveries in any quantity from one barrel to a carload. Prompt shipments.

STOCKS CARRIED: Chicago, St. Louis, San Francisco, Los Angeles, Kansas City, Mo., Des Moines, New Orleans

FRANKS CHEMICAL PRODUCTS CO., INC.
55—33RD STREET BROOKLYN, N.Y.
BUSH TERMINAL BLDG. NO. 9

BENZOATE OF SODA
BENZOIC ACID BENZYL CHLORIDE
BENZALDEHYDE

Formaldehyde
Para Formaldehyde
Hexamethylenetetramine
Bromides
Glycerophosphates
Creosote
Creosote Carbonate
Guaiacol
Guaiacol Carbonate
Silver Salts
Potassium Guaiacol Sulphonate

Salicylic Acid
Acetyl Salicylic Acid
Sodium Salicylate
Methyl Salicylate
Minor Salicylates

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GARFIELD, N.J.
PERTH AMBOY, N.J.

HEYDEN
CHEMICAL
CORPORATION
50 UNION SQUARE
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180
N. WACKER DR.
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THE SUN NEVER SETS ON EMPIRE PRODUCTS

EMPIRE
Distilling Corporation

Offers to the Trade

HIGH NUMBER FORMULAE OF SPECIALLY DENATURED ALCOHOL, made up with finest quality Cologne Spirits; TAXPAID NON-BEVERAGE ALCOHOL; Also all grades of heavy tonnage completely and specially denatured alcohol, as well as Empire Solvent. Prompt Delivery. Inquiries Solicited.

LESTER S. BACHARACH, *President.*

Executive Offices: 347 Madison Avenue, New York
Distillery: 82nd Street and Bartram Avenue, Philadelphia

"LIPOIDS"

Science has proven the value of LIPOIDS in skin preparations.

The following, now commercially available, are obtainable from our New York stocks.

CHOLESTERIN C. P.

Odorless, glistening crystals, a source of Vitamin D.

LECITHIN (Ex Ovo)

Essential to the system.

"FALBA" Absorption Base

(Reg. U. S. Pat. office)

A highly concentrated oxycholesterin and cholesterin product, derived from Lanoline, essential to the proper functioning of the body.

Pfaltz & Bauer, Inc.
300 PEARL STREET - NEW YORK CITY

DERMALAC

A new concentrated rubber latex material entirely suitable for present processes in the compounding of creams, massages, mask preparations and similar cosmetic products. DERMALAC liquefies when heated and possesses exceptional cleansing properties. Completely free from ammonia odor.

Grade Samples Available On Request

PATENTS APPLIED FOR

HEVEATEX CORPORATION

MAIN OFFICE
78 GOODYEAR AVE.
MELROSE, MASS.

NEW YORK OFFICE
90 BROAD STREET
NEW YORK CITY

Akron, Ohio *Chicago, Ill.* *Detroit, Mich.*

Charles Nale Joins Wyeth

Charles Nale has become associated with John Wyeth & Bro., Philadelphia, as head of the private formula department. He was formerly with Parke, Davis & Co., and more recently with Strong, Cobb & Co.

Dr. Chalkley Joins Benton & Bowles

Dr. Lyman D. Chalkley, long associated with the product research work of Bristol-Myers, has joined Benton and Bowles, Inc., New York, advertising agency, as Director of Research.

Dr. B. L. Oser Advanced

Dr. Philip E. Hawk, president of the Food Research Laboratories, Inc. of New York, has announced the advancement of his associate Dr. Bernard L. Oser to the position of director of that organization.

Companies

Urotropin Mark Upheld

Schering & Glatz, Inc., New York, has been given a decision against the American Pharmaceutical Co. on an allegation of infringement of the trade-mark, "Urotropin." The decision was given by Justice Edward R. Koch at a special term of Part IV of the Supreme Court of the State of New York.

Justice Koch issued a permanent injunction restraining the American Pharmaceutical Co. from using the notation, "Urotropin," or any copy or colorable imitation of that trade-mark in any manner in connection with its business. He also ordered that the company fully compensate Schering & Glatz for all profits and advantages the American company has received by reason of its infringing use of the trade-mark and for all damages sustained by Schering & Glatz as a result of such use.

The court dismissed the counter-claim of the American Pharmaceutical Co. against Schering & Glatz and the Chemical Foundation which had been impleaded by the American company as a defendant. The involvement of the Chemical Foundation was based on questions of the validity of its actions in connection with the settlement of litigation on rights to the trade-mark, "Urotropin," growing out of the acquisition by the foundation of alien properties seized during the war. The court held that the Chemical Foundation had never owned the business connected with the trade-mark, "Urotropin," and that its actions with respect to this property had been entirely legal and open. Costs in the counter-claim actions were imposed on the American Pharmaceutical Co.

Cosmetic Antiseptic

Glogau & Co., Chicago, has announced a new preparation, "Pheno chlorium Glogau," which is described as a cosmetic antiseptic. It is di-chlor-sulphamino benzoate of soda, with a chlorine content of 20 per cent. Its phenol coefficient is 45. It is recommended for use in the manufacture of cosmetics, tooth pastes, gargles, etc. Further information may be obtained from the company.

New Metaphen Product

Abbott Laboratories announce the release of Metaphen in Agar.

This product is a combination of Metaphen 1:5000 in a 3 per cent agar jelly. Clinical experience has shown it to be of value in the treatment of certain cases of colitis, particularly those showing a preponderance of streptococci in the stools. Hemorrhage is no contraindication but is often arrested. Because Metaphen is a mercurial and may exhibit toxic reactions due to personal idiosyncrasy it is important that the product be used only under the proper guidance of a physician.

Metaphen in Agar is supplied in 1-pound jars. Wholesalers are being stocked rapidly.

New Chaulmoogra Product

Chaulphosphate, or na-dichaulmoogryl-b-glycerophosphate, has been developed at the University of California Medical School, as a new derivative of chaulmoogra oil. It is said to have solved the difficulty of obtaining an active derivative which would be tolerated by the body in adequate doses.

Two New Noxzema Products

Noxzema Chemical Co., Baltimore, is planning to market two new products—a face cream and a face powder.

U. S. Agar Co. Formed

U. S. Agar Co. has been organized at San Diego, Calif., with Henry C. Moyer and Stephen H. Corfield as proprietors. The latter have been producing American agar since early in 1932.

Kolynos to Cease

The Kolynos Co., New Haven, according to a stipulation announced by Federal Trade Commission, has agreed to discontinue the use of certain copy claims. These include the claim that the product will whiten teeth three shades in three days, that the product will remove or conquer "bacterial mouth," and the expression "down to the naked enamel" unless such expression is qualified by indicating that the product will not remove tartar and other deposits requiring instrumentation.

Dr. Gleason Joins Merck

Merck & Co., chemical manufacturer, Rahway, N. J., has engaged Frederick J. Gleason, D.D.S., for dental research and advisory duties.

Dr. Gleason was graduated with honors from Temple University in 1929 and became associated in practice with Dr. A.M. Haas, professor of oral surgery at Temple. In 1932 he entered Harvard University for graduate study, completing the course and specializing in orthodontia. Many of his drawings of dissected teeth have been used for illustrations, such as those by Broomell & Fischelis in their book, "Anatomy and Histology of the Mouth and Teeth."

Dr. Gleason is a member of Pennsylvania State and local dental societies, the American Dental Association, the Harvard Society of Orthodontists, and a life member of the Anatomical League, Temple University.

Ayerst, McKenna & Harrison in U. S.

An American subsidiary has been organized at Rouses Point, N. Y., by Ayerst, McKenna & Harrison, of Montreal, pharmaceuticals, who are planning a campaign to promote the sale of their products, including cod liver oil, in the United States.

Jacques Appoints Hopkins

The House of Jacques, Inc., Kansas City, Mo., cosmetics, has appointed J. V. Hopkins as Pacific Coast sales manager. He formerly was sales manager of the Jones Store Company, Kansas City.

Du Pont Appoints King

Kenneth T. King has been appointed manager of the fine chemicals division of E. I. du Pont de Nemours & Co., Wilmington, Del. He has been with the du Pont company since April, 1919, when he started in the technical laboratory of the dyestuff department. Since that time his work has been along the line of technical and sales development, and prior to his appointment as manager of the fine chemicals division he was located in the Chicago office as assistant manager of the organic chemicals department.

Biggest Calox Campaign

The biggest advertising campaign in its history will be launched for Calox tooth powder early in July by N. W. Ayer & Son, Inc., recently appointed advertising counsel for McKesson & Robbins, Inc.

Julie Cosmetic Co. Formed

Julie Cosmetic Co. has been organized with offices at 111 Fifth ave., New York, to engage in the manufacture of a complete line of cosmetics. I. Weiser is in charge.

AMERICAN ALCOHOL

INDUSTRIAL ALCOHOL

EVERCLEAR ALCOHOL

"AMERICAN"
Completely Denatured Alcohol
(all formulae)
SOLVENT NO. 1

"EVERCLEAR"
Specially Denatured Alcohol
(all formulae)

"EVERCLEAR"
Pure Ethyl Alcohol—U. S. P.
(190 Proof—Pure Grain and Pure Ethyl Cologne Spirits)

"EVERCLEAR"
Beverage Alcohols

AMERICAN COMMERCIAL ALCOHOL CORPORATION

CHRYSLER BUILDING, NEW YORK, N. Y.

PLANTS—PHILADELPHIA, PA. • PEKIN, ILL. • SAUSALITO, CALIF. • GRETNA, LA.

Warehouse stocks and branch offices in all principal cities

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DESCOLLONGES FRERES

LYON Established 1904 PARIS

■

JASMIX

A low price oil reproducing perfectly the rich, flowery note of the Jasmin flower, so valuable by itself, or blended into other compositions.

Price: $12.00 per pound

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BENJ. FRENCH, INC.

New York: 160 Fifth Avenue

Chicago: 549 W. Randolph Street

U. S. P.

ZINC OXIDE

. . . . . by the pioneer manufacturer of zinc products . . . . . .

THE NEW JERSEY ZINC COMPANY

160 FRONT STREET, NEW YORK

Chicago Cleveland San Francisco

Green Brothers Boxes

Green Brothers, Inc., East Providence, R. I., has announced that it is now prepared to handle paper boxes direct to the manufacturing consumer. This form, which has as its slogan, "A Big Line of Little Boses," has been for years engaged in making steel rule dies and equipment for paper specialties, and is now offering a complete line of set-up boxes paper, displays, etc. The company's new plant occupies 15,000 feet of floor space and employs 25 skilled artisans.

Ludcke Co. Formed

G. L. Ludcke of Boston announces the formation of The Ludcke Co., of 227 California st., Newton, Mass. The new organization has secured exclusive selling rights for the "Herndon" portable, high-speed, semi-automatic capping machine and the "Herndon" semi-automatic, vacuum filling machine. Production of both machines will be under the personal supervision of Alton G. Herndon, their designer and patentee. Sales will be under the direction of Mr. Ludcke.

According to Mr. Ludcke, the decision to market these machines on an extensive scale was based upon the increasing demand for them. While the machines have been distributed heretofore only in a limited way, four years of successful operation in New England plants provide a sound background for the sales program. Immediate emphasis will be laid upon the sales of the capping machine because its low cost and high production features bring it within reach of every manufacturer using screw closures.

Don Herold With "Mum"

Don Herold, humorous cartoonist, will do a series of advertisements scheduled to appear in the Saturday Evening Post for "Mum", Bristol-Myers. The new series will appear under the caption of "Little Ad-Ventures by Don Herold," with humorous drawings and text by the author.

Interstate Spanish Price List

Interstate Color Co., New York, has announced that because of a rapidly increasing business in Central and South America it has had a price list printed in Spanish. This list contains the colors most commonly used by the cosmetic manufacturer. Copies may be obtained upon request.

Stokes Booklet

F. J. Stokes has just published a new booklet describing the advantages of the new "Westite" closure for collapsible tubes which was discussed rather completely in these pages a few months back. Copies of the booklet may be obtained upon request to the company.

A. M. A. Rejects

DI-HYDRANOL

Di-Hydranol, manufactured by Sharp & Dohme, Inc. because of lack of clinical evidence of its usefulness. This action was taken without prejudice against future reconsideration.

IODOCHLOROL

Iodochlorol and Iodochlorol Emulsion, manufactured by G. D. Searle & Co., Inc., because they are not entitled to proprietary names.

BISMOID

Bismoid, manufactured by Eli Lilly & Co., because it is a preparation of bismuth without sufficient originality to justify the proprietary and insufficiently informing name under which it is marketed.

A. M. A. Accepts

STOMACH EXTRACT

Soluble Stomach Extract—Fairchild, manufactured by Fairchild Bros. & Foster, New York, recommended for oral administration in the treatment of pernicious anemia.

Durez Booklet

General Plastics, Inc., North Tonawanda, N. Y., has published a new booklet on the use of plastics in packaging. It covers the use of molded plastics in boxes, jars, caps, and display stands and should be of value to all those packaging drugs and cosmetics. Copies are available upon request.

Removals

LAMONT CORLISS

Lamont, Corliss & Co. and its subsidiaries, Pond's Extract Co. and the Peter Cailler Kohler Swiss Chocolate Co., have moved from 131 Hudson st., New York, to the new Western Union Building at 60 Hudson st. The company has taken the entire sixteenth floor at this address, and most attractive offices have been arranged, including several conference and customer's rooms, private offices for the executives and ample space for stenographic and clerical help.

FRED L. BUTZ

Fred L. Butz, New York representative of the White Metal Manufacturing Co., Hoboken, N. J., and of the Waterbury Paper Box Co., is now located in new offices at 393 Seventh avenue. The telephone is CHickering 4-4566.

SHERKA CHEMICAL CO.

Sherka Chemical Co., manufacturer and importer of drugs and fine chemicals, has moved its offices to 86 Orange street, Bloomfield, N. J., where the telephone number is Bloomfield 2-6800.

Groville Sales Appointed

Groville Sales Corp., New York, has been appointed exclusive distributing agent for the "Margaret Blair" line of cosmetics.

Rosenthal Phone Number

H. H. Rosenthal Co., Inc., New York, has announced that its new telephone number is AShland 4-7500.

Financial

Stocks Steady

Common stocks of corporations engaged in the drug and cosmetics industry have held their own during the past month, which the rest of the market has gone off a few points, according to the stock price indexes of the Standard Statistics Company, of New York. Detailed figures comparing the drug stocks price index with that for 351 industrials follow:

1934	*Drugs and Cosmetics*	*351 Industrials*
May 2	83.2	82.9
9	82.7	80.2
16	79.9	77.5
23	80.5	77.9
29	82.0	79.6
June 6	83.6	79.5
1934 High	86.4	90.5
Low	71.0	77.5
1933 High	99.7	86.6
Low	53.9	38.7

Dow Calls Bonds

The Dow Chemical Co. has called for redemption on August 1, 1934, five hundred thousand dollars ($500,000) of its outstanding Ten Year 6% Notes at 101 plus accrued interest. The menbers of the notes to be redeemed and additional infromation may be obtained *after June 15, 1934*, from the Trustee, The Cleveland Trust Co., Cleveland, Ohio.

Interest on said redeemable notes will cease to accrue on August 1, 1934.

Abbott Dividend

Abbott Laboratories has declared an extra of 15 cents and the regular quarterly dividend of 50 cents a share on the capital stock. The dividends are both payable July 2 to stockholders of record June 18.

The directors also announced the incorporation of Abbott Laboratories de Mexico, S. A., to serve as a branch of the parent company in Mexico, Manuel Doblado, who has been associated with the company in that country for eleven years, is general manager.

An extra dividend of 10 cents was declared on February 15 by the directors in conjunction with the regular quarterly dividend at that time.

Beehive Brand
BEESWAX

PURE

Without stretching the truth, it can be said that Beehive Brand Beeswax is virtually a synonym for purity. Raw material is selected and bought at the world's premier sources of crude Beeswax. Beehive Brand is subjected to natural sun-and-air bleaching and other refinements far beyond the average commercial Beeswax. Makers of the finer qualities of cosmetics are aware of this and also of the ultimate economy of specifying Beehive Brand—because they can use less of it by volume, to the improvement of their formulae. Complete information and analysis will be supplied on request. Address:

WILL & BAUMER CANDLE CO., INC.
Est. 1855
SYRACUSE, NEW YORK

Spermaceti—Ceresine—Yellow Beeswax
Composition Waxes—Hydistear—Stearic Acid—Red Oil

Do not compromise on quality with Otto of Rose. Insist upon the best. Here and abroad the highest standard in

BULGARIAN
OTTO OF ROSE
is represented by the brand
BATZOUROFF & CO.
(Established 1845)
SOFIA, BULGARIA

Modern Distilleries at
Kanare Karadja Rahmanli
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SOLE DISTILLERS BY VACUUM PROCESS

EXCLUSIVE SELLING AGENTS
GEORGE LUEDERS & CO.
New York Chicago San Francisco Montreal

McKesson PRODUCTS
"Quality Since 1833"

COD LIVER OIL
Medicinal and Poultry
CITRIC ACID
Crystal and Granular
BENZOIC ACID
U. S. P. Powdered
AGAR AGAR NO. 1
ALKALIES
CHLOROFORM
U. S. P. and Technical
CAMPHOR
Japanese, all sizes
MENTHOL
QUININE AND SALTS
BENZOATE SODA
U. S. P. Powdered and Granular
VANILIN

McKESSON & ROBBINS
Incorporated
79 CLIFF STREET NEW YORK

DRUGS AND CHEMICALS
ESSENTIAL OILS AND RAW MATERIALS

Broadcasts

JOE COOK WITH COLGATE

The Colgate House Party Show every Saturday at 10 p. m., Eastern Daylight Saving Time on the NBC network is now featuring Joe Cook. The program is on behalf of Colgate Ribbon Dental Cream.

CHOLLY KNICKERBOCKER WITH ARDEN

Elizabeth Arden is now featuring "Cholly Knickerbocker" on a coast-to-coast broadcast over CBS each Tuesday from 9 to 9.15 E.S.T.

EDDIE CANTOR WITH LEHN & FINK

Lehn & Fink will feature Eddie Cantor on two 13-week cycles over the air during 1935. Cantor will not only act in the broadcast, but also produce it and hire his own supporting talent. The amount involved in the contract is reported greatly in excess of Cantor's current earnings with Chase & Sanborn.

Mueller Joins Van Dyk

Walter Mueller, until recently vice-president and sales manager of Belmay, Inc., New York, is now associated with Van Dyk & Company, Inc., Jersey City, New Jersey. Mr. Mueller has been identified with the toilet articles and allied industries for a number of years. In 1912 he became sales and advertising manager of the toilet articles division of A. A. Vantine & Co., Inc. Later on he was with Morana Inc., now van Ameringen-Haebler, Inc., as secretary and sales promotion manager. He was also for a number of years a member of the executive board as well as secretary-treasurer of the Manufacturing Perfumers Association, now the Associated Manufacturers of Toilet Articles.

Coppins and Kass Die

Harold C. Coppins, factory superintendent of F. N. Burt Co., Ltd., Buffalo, and William Andrews Cass, an executive of the same firm, were among the victims of the unfortunate crash of an American Air Lines passenger plane in the Catskill Mountains on June 9. The seven occupants of the plane were all killed instantly.

Obituaries

Willard Ohliger

Willard Ohliger, chairman of the board of Frederick Stearns & Co., Detroit, died in that city June 8, aged 56, after an illness of several weeks.

He was born Nov. 26, 1877, in Wooster, O. He obtained his education at Wooster College, Philadelphia College of Pharmacy and the University of Pennsylvania.

In 1901 he joined the analytical staff of the Stearns company and shortly afterward was promoted to chief chemist. By 1905 he was general director of all manufacturing.

He was appointed general manager in 1915 and in 1921 was elevated to the presidency of the organization. Later he was elected chairman of the board.

Charles C. Doll

Charles Christian Doll, president and general manager, Zemmer Co., Pittsburgh, pharmaceuticals, died in that city, May 17, aged 68. He was born in Syracuse, N. Y., January 4, 1866, and had spent his entire life in the drug business. His former connections included Brown & Dawson, wholesalers, and the Fraser Tablet Co., New York.

In 1905 in association with H. B. Johnson, George C. Hall, and J. A. Elliott, he organized the Zemmer Co. In 1928, he and Mr. Johnson, purchased the others' holdings and reorganized the company, with Mr. Johnson as vice-president and treasurer, and E. C. Berg as secretary.

Herman A. Metz

Herman A. Metz, for many years an outstanding personality in chemical business, and president of several firms including H. A. Metz Laboratory, New York, died in New Rochelle, N. Y., May 17, aged 66. He was the first to introduce "Salvarsan" and "Pyramidon" into this country and engaged in their manufacture under the German patents. He was internationally known for his chemical activities and at his death was president of General Dyestuffs Corp., Advance Solvents & Chemical Corp., Agfa Ansco Corp., and many other companies in addition to the H. A. Metz Laboratories.

He had also been an active figure in public life, having at one time been Congressman, Controller of the City of New York, and Colonel in the U. S. Army, retired with the rank of General.

Joseph F. Scanlon

Joseph F. Scanlon, executive director in the United States for Coty, Inc., died at his home in New York, May 28 after a brief illness. He was a native of Ireland and attended Dublin and Oxford universities, coming to this country and serving for a time as an instructor at Harvard. He then entered the United States consular service and served in England, Italy and France. In the last named country he became associated with the Coty perfume interests and was sent here to develop the company's business, in which project he was eminently successful.

Edwin W. Grove Jr.

Edwin W. Grove, Jr., chairman of the board, Paris Medicine Co., St. Louis, died in that city May 30, aged 44. He was the son of the founder of the company and became head of the business in 1927 when his father died.

William E. Danner

William E. Danner, president of Henry K. Wampole & Co., Perth, Ontario, died unexpectedly June 3, aged 74.

Dr. I. V. S. Stanislaus

Dr. I. V. Stanley Stanislaus, consulting chemist for the Vick Chemical Co., and professor of medicine at the Brooklyn College of Pharmacy, died suddenly in New York, June 1, aged 66.

D. M. Penick

D. M. Penick, retired president of the Strother Drug Co., Lynchburg, Va., wholesaler, died in that city May 11, aged 67. His entire life had been spent in the drug business and since 1890 he had been with the Strother company. He had been in ill health for five years, retiring from active business two and a half years ago after serving the company as president for 28 years. A surviving brother is S. Barksdale Penick.

Mrs. Mary Gove Pitman

Mrs. Mary Gove Pitman, vice-president and director of the Lydia E. Pinkham Medicine Co., Lynn, Mass., and a granddaughter of the founder of the company, Lydia E. Pinkham, died May 30, at Phillips House, Boston, following an operation May 22. She was forty-one years old and was born in Salem, Mass. Her father, the late Hon. William E. Gove, was for twenty years previous to his death in 1920, the president of the Pinkham company, and her mother, Mrs. Aroline Pinkham Gove, only surviving child of Lydia E. Pinkham, is still treasurer of the company which position she has held since 1881 when the company was organized.

The 6-Ways-Superior Oil of Orange

SIX-POINT SUPERIORITY

1. Finer Flavoring Value
2. Uniform Dependability
3. Superior Aroma
4. Truer Color
5. Stability in Your Product
6. Better Results at Lower Cost

COLD pressed from rich California Oranges by exclusive methods, Exchange Brand Oil of Orange U.S.P. gives you *unvarying high quality* unexcelled by any other oil. "World's largest producers of citrus products" means lower costs for the Exchange *and economy for you.* A test will prove the 6-point superiority of Exchange Brand. Try it.

CALIFORNIA COLD PRESSED

Oil of Orange U.S.P.

Sold to the American market exclusively through:

FRITZSCHE BROTHERS, Inc.
78-84 Beekman St., New York City

DODGE & OLCOTT COMPANY
180 Varick St., New York City

Exchange

NRA WE DO OUR PART

Distributors for
PRODUCTS DEPARTMENT
CALIFORNIA FRUIT GROWERS EXCHANGE, ONTARIO, CALIF.
Producing Plant
THE EXCHANGE ORANGE PRODUCTS CO., ONTARIO, CALIF.

Levissima
MAGNESIA OXIDE
U. S. P.

REGD. TRADE MARK.

for

MILK of MAGNESIA

You recognize a superlative grade of Milk of Magnesia by its smooth texture, fine suspension, pleasant taste, excellent color and uniformity. All of these qualities may be easily obtained in your Milk of Magnesia through the use of "Pattison's" LEVISSIMA, Oxide of Magnesia, U.S.P. Its extremely fine particle size, intense whiteness, physical and chemical purity, and chemical reactivity make it particularly suitable for the manufacture of the finest quality Milk of Magnesia . Send for samples and prices.

Also Magnesium Carbonate, U. S. P. and Technical, powder and blocks, and Magnesium Hydrate, Pharmaceutical.

SCHOFIELD-DONALD CO., INC.
154 Nassau St. New York

TRAGACANTH

Powder Ribbons

•

QUINCE SEED

•

HENNA

NRA WE DO OUR PART

W. BENKERT & CO.

INCORPORATED

Crude Drugs • Cosmetic Crudes

100 Gold Street New York City

Other Offices: DETROIT—CHICAGO—ST. LOUIS

An up-to-date and practical guide-book for manufacturers

MANUFACTURERS' PRACTICAL RECIPES

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RAW MATERIAL MARKETS

Chamomile Flowers
Effects of Recent Drought on Central European Botanicals

Edited by Harry G. Kelbly

Several recent developments account for the higher prices prevailing in both the shipment and import market for Hungarian chamomile flowers.

Direct reports from Hungary indicate that the serious drought condition that recently prevailed has materially reduced the various botanical crops and has so adversely affected the chamomile flowers that production will be reduced by 50 per cent. The drought which lasted for about six weeks was not local but extended throughout Central Europe. Practically all the botanicals produced in this region were affected, but it seems that the new chamomile crop was most severely hit.

At the beginning of April all indications pointed to a favorable production. The bushes and flowers were well developed. About the 15th of April, however, a dry heat wave swept over Hungary and the adjacent countries just at about the time the chamomile crop needs most moisture to fully develop the flowers.

The Hungarian Government has also been quite active in recent months in their efforts to protect chamomiles, one of the main staple crops of that country. The section of Hungary in which chamomile flowers are grown was divided into three parts after the World War. One quarter of the entire territory was taken away by Yugoslavia, and one eighth by Rumania.

With the producing area therefore split among three different countries the situation confronting producers called for united action. On May 6 the Hungarian government called a meeting of the Hungarian, Rumanian and Yugoslavian Agricultural Governments and formed a concentration which set the export price for shipment to the United States at 30c per pound. This means that no export permission will be granted to shippers unless they guarantee to bring 30c for each pound of chamomiles into the country.

The Government National Bank is in control of export permissions. If permission is granted to exporters they must show a contract and bill of lading as the first step to permission to export. With Hungary and others of the producing countries bankrupt the aim is to bring gold into the country to reestablish the value of their own currency. Every exporter must therefore have the value of their exports approved and it is in this way that the banks have entered the situation to add considerable strength to the market position of this medicinal raw material.

The third and final factor in the situation has been the recent large rejections by the Federal Food and Drug Administration as being in violation of the act governing the quality of the product. During the week of April 18th two lots of 45 cases were rejected and again during the week of April 25, 25 cases were rejected. The most recent rejection was during the week of May 16, when 25 cases and 84 bales were refused entry here.

It might be noted that a year or two back when the Government proposed that no foreign botanicals would be released for reclamation in the crude drug mills here but must be returned to the shipper for reprocessing little or no serious opposition was noted on the part of the crude drug importers. The feeling was that shippers would take more care in both selection of the material for shipment to this country and the general cleaning that is generally necessary. The high percentage of rejections—especially on Chamomile flowers—proved this to be a fallacy.

HUNGARIAN CHAMOMILES

According to present regulations, when a botanical is once rejected by the Department it must be returned to the country of origin for reclamation. Of course this entails considerable shipping expense and serious delays. It also so curtails the possible profit of shippers that they are not particularly anxious to ship here at all, which has the effect of creating at least temporary shortages from time to time.

The unfavorable weather conditions are said not only to have reduced the size of the crop, but also to have seriously affected the quality as well. It is therefore most likely that when the new crop must arrive for replacements in this market the Department will be forced under the present rulings to reject even a larger percentage of the shipments than had been the case with the old crop.

The attitude of importers as relating to rejected material is said now to have undergone considerable change. A committee of crude drug dealers is in process of formation for the purpose of contacting the Department for a change in the ruling that prohibits reclamation of botanicals on this side. Their argument is that the ruling has fallen down and has failed to produce the desired effect either because producers abroad do not know how to clean the drugs to meet American requirements or either they do not have the proper facilities to do the work. Also that the work can be done more quickly and satisfactorily here giving work to American mills who specialize in it.

The foregoing accounts for the fact that Chamomile flowers have about doubled in value since the first of the year. The spot market price ranges from 35c to 40c per pound as to quality, quantity and seller.

As regards the drought in Central Europe, this is said to have also affected other botanicals produced in this region, particularly stramonium, and belladonna. These items have already firmed up on spot with the former at from 25c to 26c per pound and the latter at from 30c to 31c per pound. Both importers and consumers are watching developments in Central Europe closely.

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Tonka Beans

More Liberal Supplies Expected

Although tonka beans continue to be inordinately high in price, certain factors in the spot market are of the opinion that some recession would be in order at this time. Some months back there undoubtedly was a shortage due to the small crop of last year but the new crop is now coming in and this item should take a turn to the easy side.

This is the third year in a three year crop cycle and according to past performance should be a good one. It would seem, although no one has been able to account for the fact, that there is one small crop, the following moderate in size, and the third or bumper crop is the routine followed in this order. The two small crops have just been experienced so that the crop now coming in should in all respects be ample.

The position in the primary market, however, continues tight from a supply point of view insofar as importers for the drug and cosmetic trades are concerned. Recent arrivals of 126 cases in one shipment totaling some 37,000 pounds indicate that sizable quantities of beans are available for shipment. This lot, however, was for the account of tobacco interests, the largest users.

Tonka beans are the seeds of a large tree indigenous to Brazil, which is the source of the English tonka bean. The fruit is an oblong-ovate pod, enclosing a single seed, from 3 to 4 cm. long and about 1 cm. wide. The seed has a strong, agreeable, aromatic odor, and a bitterish aromatic taste. Its active constituent is a crystallizable, odorous substance, called coumarin. One pound of the beans yields about 108 grains of coumarin. After collection the beans are shipped to Trinidad where they are cured in rum to bring out the coumarin or active principle.

Tonka beans were formerly used to a large extent to adulterate tincture and extract of vanilla. It was formerly mixed with vanilla for extracts until the Pure Food and Drugs Act prohibited the use of it unless so specified on the label. It cannot then be called vanilla extract. This to a great extent reduced the consumption.

The tobacco interests are now the largest consumers. They formerly bought from the regular importers and dealers in this trade but of late years have been importing their requirements direct. It is used as a filler in cigarettes and smoking tobacco and also as a flavoring material particularly in snuff, being either mixed with it in the state of powder or put entire into the snuff box.

In the drug and cosmetic trade it is used as a fixative in certain types of perfumes. It also is used to flavor castor oil and to disguise the odor of iodoform. The fluid extract has also been used with advantage in whooping cough, but it paralyses the heart if taken in large doses.

The main interest of importers now is to obtain a sufficient supply to meet the requirements of the drug and cosmetic consumers, and at a price more nearly normal for this item. The range now is from $3.90 to $4.00 per pound whereas a normal price is said to be about from $1.25 to $1.50 per pound.

Botanicals

Trade continued light with some price unsettlement noted. Quotations were less firmly held during the past month than had been the case since the first of this year. Price movements were mostly declines but it was said that this condition was a result of the small demand but would likely prove only temporary as prevailing factors as regards new crops was primarily bullish.

The situation as regards domestic collections was not encouraging from a supply standpoint. The difficulty is to induce field workers to deliver normal quantities at prices which primary market collectors felt justified in paying.

Conditions in Europe were also discouraging. The severe drought at the beginning of the growing season cut deeply into the new crops of many important drugs. The Chamomile crop was particularly hard hit as was Hungarian poppy, paprika, stramonium, etc.

Imports of crude drugs, herbs, leaves, roots, etc. for the first quarter of 1934 were valued at $444,514, compared with $965,392 for the first quarter of the preceding year. Pyrethrum, licorice root, cinchona bark, and crude opium made up the bulk of receipts. Imports for the whole of 1933 were valued at $5,044,417 and for 1932, $5,004,662.

HENNA—Good sized sales but keen competition was the lot of this item. Open quotations were not changed—the powdered material selling at from 12c to 13c per pound and leaves at from 9c to 9½c—but it was reported that shading of values was resorted to in order to get business. Stocks were of ample size on spot.

DIGITALIS—Firm on spot at from 32c to 34c per pound being a probable reflection of the fact that the drought in Central Europe is likely to result in a small production this year. Digitalis leaves were gathered in smaller quantities than usual during the fall of 1933. The crop was estimated at about 30 to 50 tons from Germany. The German demand was reported to be good and the market situation very firm.

IPECAC—Ipecac is found in the interior and southern regions of the State of Bahia, Brazil. There is no attempt to cultivate it and the root is not found in abundance. The natives gather the roots from time to time and ship them to Bahia. The largest shipments are made during the dry season.

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Look over this Table of Contents

How many Questions on this page can YOU answer?

What chemical will dissolve dandruff?

What causes a vegetable oil to go rancid and what chemical will prevent rancidity?

Is lithopone in face powder injurious?

What causes a shampoo liquid to become turbid?

Is there a simple way to classify cosmetics to make research easy?

What is the best machine to use for making emulsions?

How can an emulsion be kept from separating?

Must a face cream be antiseptic?

What property must a sunburn preventative have?

Can sulfonated oil be used in tooth paste?

What is the best way to fill vanishing cream?

In what respect is a homogenizer superior to a colloid mill?

What is the difference between a vacuum and a pressure filter?

What is the most suitable type of liner for cream jars?

Can bleeding and sweating of creams and lipsticks be prevented?

What is the best way to arrange equipment for making cosmetics?

How many different ways are there for making powder?

What is meant by absorption base?

What is "white henna"?

What is a "color rinse"?

In what way can heavy quince seed and other mucilages be clarified?

What materials may be used to soften the beard?

Is barium sulfate or "blanc fixe" a good ingredient of face powders?

How can a lipstick be kept from crumbling?

Can sulfonated oils be used in cleansing creams?

What functions must a scalp tonic perform?

What are the ideal properties of a cleansing cream?

In what creams is lecithin used?

What causes pearliness in vanishing and shaving creams?

What are the functions of a tooth paste formula?

How can warts be removed?

What are eye cosmetics?

How are hand creams made?

What is a pony mixer?

In what way does ultra-violet light affect a sunburn preventative?

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Can the skin be bleached?

What causes blackheads?

How may freckles be removed?

Why is it necessary to chill some kinds of mouth washes before filtering?

What chemicals make good cosmetic antiseptics?

Should tooth pastes be made hot or cold?

What cosmetic property does coconut oil possess?

What is meant by the wetting action of lather?

Are soapless shampoos better cleansers than liquid soaps?

How is sodium lauryl sulfonate used?

What chemicals are the best deodorants?

How should a depilatory paste be made?

What is the difference between a paste and a cream rouge?

Should a foot deodorant be antiseptic?

Can a small cosmetic factory be laid out for less than $1,000.00?

Is a pebble mill as good as a pulverizer for making face powders?

What is the best way to clean sprinkler top bottles?

Is it necessary to use distilled water in cosmetics?

What is the best production shape for a cosmetic bottle?

What properties should a nail polish have?

How is nail polish cream made?

What will relieve sunburn?

Is sulfonated castor oil useful in scalp tonics?

What purpose in cosmetics is served by irritants?

How can oily scalp be relieved?

How many cosmetics should be chilled by artificial means?

How is hair softened for permanent waving?

What causes jelly brilliantines to separate?

In what cosmetics is rubber latex used?

What kind of hair preparations can be made with deodorized kerosene?

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CLEANSING CREAMS—Properties of an ideal cleansing cream. Sulfonated oil in cleansing creams. Quick melting types. Jelly type. Absorption base type. Rolling massage cream. Liquid cleansing cream. Cleansing lotion. Detailed manufacturing procedure and equipment.

LUBRICATING (TISSUE) CREAMS—Theories of skin absorption. Function of lubricants. Uses of hot and cold applications. Value of massage. Materials used: lanolin, hormones, lecithin, cetyl alcohol, cocoa butter, cholesterin, absorption bases. Formulation with lecithin and cholesterin, cetyl alcohol and cocoa butter, lanolin and cetyl alcohol. Manufacturing suggestions.

VANISHING CREAMS—How to secure pearliness. How to adjust consistency. Function and effects of alkalis. Use of ethyl ether of diethylene glycol and glycerin. Triethanolamine and glyceryl monostearate. Preventing shrinkage. Mechanical filling. Production hints.

COLD AND ALL PURPOSE CREAMS—Basic type. How to make different kinds. How to modify cold creams. Consistency and shine. All purpose creams. Materials used and detailed manufacturing procedure. Various methods of production.

HAND CREAMS—Cetyl alcohol creams. Function of glycerin and glycerin substitutes, lecithin and sodium lauryl sulfonate in hand creams. Manufacturing procedure.

PRINCIPLES OF COSMETIC RESEARCH—Simplification of research. How to identify and classify cosmetics. Physical categories. Manufacturing equipment and procedure for each class. Aids in manufacture, short cuts and suggestions.

LIQUID CREAMS—Formulas for various types. Lanolin in liquid creams. Cucumber creams. The use of homogenizers. Maintenance of stability.

ASTRINGENT CREAMS—Astringent chemicals. Value of astringent creams. Formulas for various types. Production suggestions.

BLEACHING CREAMS—Chemicals possessing bleaching properties. Mercury salts. Methods of compounding. Precautions.

ACNE, BLACKHEAD AND ECZEMA CREAMS—Causes of acne, blackhead and eczema. Cosmetic treatment. Antiseptics. Cleansers. Diet. Compounding data.

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TOOTH PASTES—Polishing agents, excipients, binders, sweetness, flavors, lubricants, antiseptics. Alkaline and acid pastes. Functions of formulas. Preventing bleeding and hardening. Milk of magnesia paste. Suggestions. Equipment.

TOOTH POWDERS—Flavors. Oxygenated. Sodium perborate. Antacid tooth powder. Acid powder. Alkaline powder. Manufacturing procedure. Short cuts.

SHAVING CREAMS—Softening the beard. Properties of lather. Preventing razor rash. Use of sodium cholate, sodium lauryl sulfonate, lecithin, cetyl alcohol. Superfatting. Elimination of ageing by means of refrigeration. Detailed manufacturing procedure for many types of cream.

BRUSHLESS SHAVING CREAMS—Relation to vanishing creams. Materials used to soften beard and reduce surface tension. Sulfonated oils and cetyl alcohol in brushless shaving creams. Manufacturing procedure and equipment used.

AFTER SHAVING LOTIONS—General purpose lotions. Lotions for oily skins. Lotions for dry skins.

BEARD SOFTENING PREPARATIONS—Preparing tender skins for shaving. Chemicals used as counter irritants. Materials employed to soften beard and prevent irritation. Lotions and creams.

DEODORANTS—Liquids, pastes, compacts, sticks, powders. Chemicals possessing deodorant properties. Antiseptics employed. Nature of perspiration. Function of deodorants. Detailed formulas and manufacturing procedure.

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SKIN TONING LOTIONS—Toning the skin after application of creams. Cooling and antiseptic chemicals. Clarifying and filtering. Homogenizing.

ASTRINGENT LOTIONS—Refining the pores by means of astringent solutions. Incompatibles. Filtering.

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Cream powders
Nail whites
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Acne lotions
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Tooth powders
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Permanent waving fluids
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Scalp ointments
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Vanishing creams
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Cream rouges
Depilatory powders
Talcum powders
Depilatory pastes
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Preventive creams
Sunburn remedies
Liquid face powders
Foot powders
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Shampoo liquids
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Liquid creams
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Alopecia tonics
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Essential Oils

With few exceptions the local trade reported business as being more quiet throughout the past month. Prices continued to show stability, however, and this was considered a favorable sign especially in view of the fact that import costs tended downward within moderate limits because of the decline in foreign rates of exchange when quoted in terms of the dollar.

Imports of essential oils into the United States for the 3 months ended March 1934 were valued at $1,119,000, as against $602,000 for a similar period during 1933. Details of the trade are shown in the following table:

	1933 Jan.-March Incl.		1934 Jan.-March Incl.	
Essential Oils	*Pounds*	*Value*	*Pounds*	*Value*
Cassia and cinnamon, free	90,548	40,126	93,020	60,683
Geranium (free)	31,562	97,845	32,896	146,052
Otto of Roses (free) (a)	8,151	44,698	(a)7,646	58,516
Bergamot (free)	24,431	26,138	24,042	35,898
Citronella and lemon-grass (free)	354,675	121,191	485,973	172,327
Lavender and spike lavender (free)	35,341	41,393	74,396	158,018
Lemon (dut.)	47,185	25,803	62,925	46,454
Orange (dut.)	32,390	16,935	39,045	26,276
Sandalwood (dut.)	877	3,710	82	883
Lime (free)	8,394	43,216	11,222	650,72
All other (free)	527,007	96,306	438,338	246,811
(dut.)	168,230	44,679	261,398	104,730

(a) ounces.

Exports of various American essential oils for the first quarter of 1934 were valued at $345,000, as against $263,000 for the first quarter of 1933. Details of the trade are shown in the following table:

	1933 Jan.-March Incl.		1934 Jan.-March Incl.	
	Pounds	*Value*	*Pounds*	*Value*
Peppermint	54,000	$107,000	55,000	$139,000
Spearmint and other mint oils, n.e.s.	5,800	6,000	24,000	31,000
Citrus oils	6,700	6,800	21,000	16,000
Other natural essential and distilled oils	172,000	112,000	341,000	110,000
Blended, compounded, or mixed perfume—flavor oils, exclusive of synthetic aromatic compounds	15,800	32,000	21,000	49,000
Lime (free)	8,394	43,216	11,222	65,040

CASSIA—China continued quite a strong market and the situation resulted in a firm market on spot on the basis of from $1.15 to $1.20 per pound for U. S. P. goods. Some factors said the market should not be lower than the outside figure when based on replacement costs.

From 95 per cent to 99 per cent of the cassia reported from French Indo-China is destined for Hong Kong, where it is graded and reshipped to the United States and other purchasing countries. Exports during 1930, 1931, and 1932 amounted to 666, 873 and 887 metric tons respectively.

MARGOSA OIL—According to the "Algemeen Landbouwweekblad" (private agricultural weekly published at Bandoeng, Java), a decoction of the bark of the margosa tree is used against intermittent fever and also as a tonic. When the bark is cut, a large quantity of watery juice flows, which is drunk in British India to cure stomach ailments.

LEMON—Consumption of Californian oil was said to have increased materially since the institution of the exceptionally low price of 50c per pound. The intention of the producers was to encourage a large number of manufacturers using lemon oil in their products to try the domestic product. The price was set at such a favorable level as to make it almost impossible for manufacturing consumers to ignore this product. This oil is guaranteed by the 13,500 cooperative members of the California producers which markets about eighty per cent of all the citrus fruit grown in the state of California. The lemon oil is produced under conditions which qualify it under the definition of the United States Department of Agriculture for use in official extracts, where large quantities are now being utilized.

SPEARMINT—With crop conditions fairly good this item took on an easier undertone with the tendency being toward more competition. Prices ranged from $1.05 to $1.10 per pound.

ANISE—Very firm undertones prevailed in all quarters. Some dealers were disposed to advance quotations and were rejecting all bids made at less than the minimum spot quotations of from 42c to 43c per pound.

CARAWAY—Very firm at unchanged price level of from $1.10 to $1.15 per pound. Reports concerning the new crop were mainly adverse. The market was very firm in the primary with indications that replacement costs will shortly tend upward.

Markets Dull

With the beginning of the summer season, movements of prices seem definitely to have slowed down to a walk. The 50 commodity index in June was 68.1 compared with 68.4 in the previous month.

Medicinal chemicals averaged a small net decline in June, the index registering 75.9 as against 76.4 in May. Metallic bismuth declined to $1.30 from the previous $1.40; cod liver oil was quoted at $25.50, 50 cents less than the quotation of the previous month; menthol moved 5 cents lower to $2.70; mercury metal fell back to $75.00 a flask.

Six price changes in the members of the botanical price index caused a decline from 67.9 to 67.6. Three changes were increases: belladonna from 21 to 25 cents; buchu from 24 to 25 cents; ipecac from 65 to 70 cents. Three changes were decreases: aloes from 14 to 13.5 cents; digitalis from 35 to 32 cents; gentian from 12 to 10 cents.

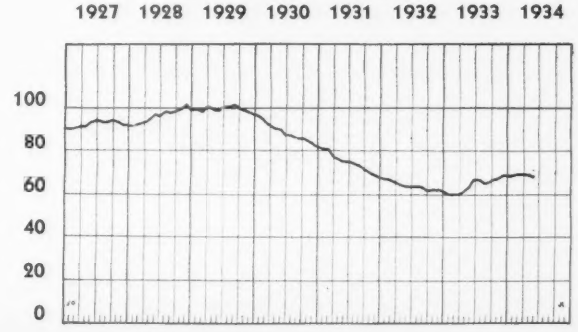
The essential oil index rose 53.4 to 53.5 because peppermint increased five cents to $2.55.

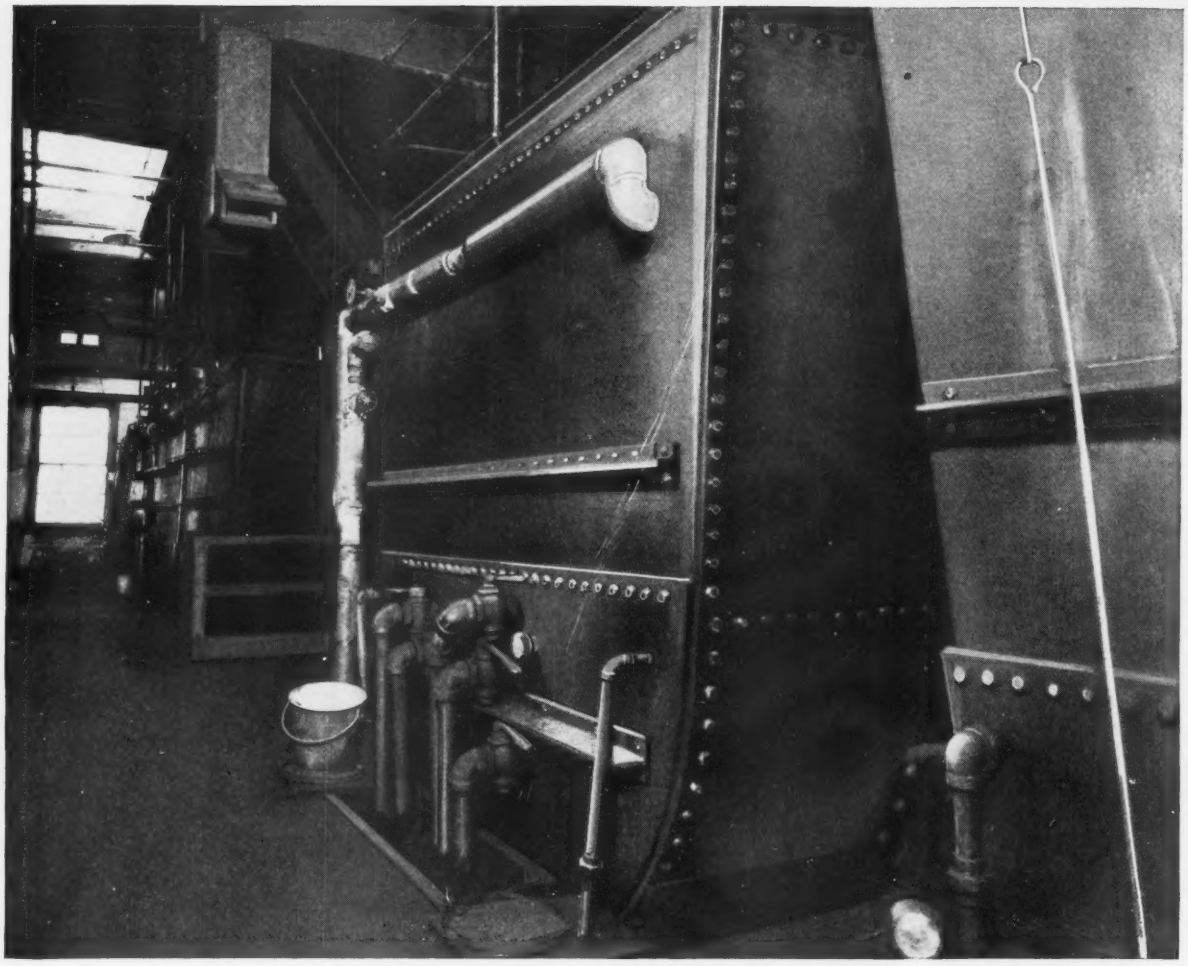
Finally, the cosmetic raw material index rose from 73.1 to 73.3; glycerine rose 1 cent to 13¾ and menthol decreased from $2.75 to $2.70.

Artificial Honey

Powdered sugar, 5000 parts are mixed with 400 parts pulverized tartaric acid, one part dry honey color and 2.5 parts aromatic essence of honey. Sugar, tartaric acid and coloring matter are triturated in porcelain dish and then flavoring extract is added. To make artificial honey one kilogram of sugar is cooled with 300 grams water to give syrup and then 40 grams of honey powder are added to hot mass. Mixture is agitated without cooling for few minutes and then allowed to cool.

50 Raw Materials—Weighted Index
1926 Average Prices Equal 100





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Java Citronella Oil

Reports from the primary market indicate the fall of prices there has come to a standstill but that, owing to the fact that speculative interests have the upper hand in Java, rises and falls in prices are very well possible in the near future.

Speculative interests in Java have bought up large quantities of oil, which are now kept out of the market. In the consuming countries stocks of oil are mounting. Notwithstanding these large stocks kept out of the market in Java, the exports show an enormous increase, so that it has to be accepted that Java production is much larger than necessary to meet requirements.

The great increase in exports for the first four months of 1934 are noted from the comparison with a similar period in previous years:

	1931	*1932*	*1933*	*1934*
	tons	*tons*	*tons*	*tons*
January	74	63	107	160
February	73	83	114	134
March	69	72	103	126
April	72	91	110	150
	288	309	434	570

It is the opinion of some factors abroad that drastic measures will have to be taken to keep production within bounds. Others, however, favor the elimination of the producers with the highest cost prices and insufficient working capital and in this way bring about a more natural restriction.

From time to time Java reports a rather brisk market. According to reports, however, this is mainly due to speculation. Certain speculative circles are said to be trying to get the assistance of the Government to bring about a restriction of output, but as yet opinions as regards definite results are divided.

Process Used in Extracting Oil of Sage in Yugoslavia

Oil of Sage is obtained by distillation, not by extraction. Copper cylinders are used for this purpose, the crude plant being placed inside the cylinders. Water steam produced in a separate boiler passes through the crude sage. The water steam extracts the oil from the crude plant and passes with the oil through a refrigerator. Condensed water and oil flow into a special receptacle in which they separate.

The capacity of copper cylinders containing the crude sage amounts to from 400 to 700 liters and up to 1000.

The water steam which comes out of the boiler and passes through the crude plants has a temperature of 100° C.; rarely higher, but if at all not more than a single degree and that only when the pressure in the boiler is somewhat higher. Usually the pressure is never over 2½ atmospheres. Thus the normal temperature of operation is 100° C.

DISTILLING JAVA CITRONELLA OIL

The measure of quality of the oil is the quantity of alcohol ingredients. This quantity is marked by the "Index of ester after acetylation." This index varies between 40 and 60. The lower the index the less borneol there is in oil and the quality is more inferior. The quality of oil is appraised also by odor; the more there is of the one odor and less of borneol the poorer the quality of oil.

The specific gravity of sage oil is 0.915 to 0.930 at 15°.

The refractive index number at n 20° is 1.458 to 1.468.

The optical rotation is +2° 5′ to + 25°.

The acid index number is 0 to 2.

The ester index number is 6 to 17.

The ester index number after acetylation is 40 to 60.

Solubility: 1 to 2 volumes and over, 80% alcohol; 3 to 12 volumes, 70% alcohol.

Professor Bradanovic especially emphasizes the fact that from his own analyses out of 13 kinds of oil distilled by him, he found that in six cases the optical rotation was negative, to wit: 0°10′ to —7°47′.

The color of the oil is light yellowish or greenish-yellowish. The odor of the oil resembles the odor of the plant, and there still remains a light odor of camphor.

The oil is obtained from the Salvia officinalis species, namely from the dried green branches. The fewer wood parts the branches of the specimen contain the better its quality is.

Before distilling it is not necessary to prepare the sage. The sage used in distillation process is dried beforehand in the sun; green sage is not distilled. The plant is collected after blossom time, that is, from July to October, then dried and afterwards either exported or distilled.

Professor Bradanovic emphasizes the fact that from his own observation the oil obtained from the plant, when in full bloom, contained larger quantities of alcohol and ester and less ketone, and that its odor was accordingly more agreeable while its commercial value is also higher. The rendering of the oil of the plants which the professor personally distilled, resulted in 8.50 kilos to 21.70 kilos of oil from 1000 kilos of crude, or 0.85% to 2.17%. (From Consul Egmont C. von Tresckow) Professor A. Bradanovic, director of the Commercial Academy at Split.

Eucalyptus Oil

In the near future the manufacture of oil from eucalyptus trees may be carried on extensively in South Africa, for the Union has many extensive eucalyptus plantations, and they are on the increase. Some of the timber is felled for various purposes, but no attempt has been made to extract the valuable oils in the foliage. A good deal of rich foliage is also obtained when the forests are cleared of coppice growth and the stumps are cleared. All this waste material could be used to provide oil. This question, however, has not escaped official attention, and the necessary investigations have been initiated by the Chief Conservator of Forests and the Director of Native Agriculture. These officials were eager to discover how such oils would compare with Australian oils, and what the general yield and quality would be. The first investigations were made in the Natal Native Forest Plantation at Zwartkop, but later on leaves were obtained from many parts of the Union

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and submitted to careful test. In this way it has been possible to test all varieties of leaves and to determine the geographic influence upon quality.

When the leaves had been tested by quality chemists an official report on the investigation was published. According to this report, a good yield of excellent quality oils can be produced from leaves of South African eucalyptus. Both as regards yield and quality, South African oils compare favorably with oils produced from corresponding Australian species. Each type of oil contains one or more constituents principally responsible for its market value. For concentrating these desirable constituents, and at the same time removing those not required, the crude oil must be subjected to fractional distillation. Because of an over-production of eucalyptus oil the market price is at present very low—practically unremunerative.

Gums and Waxes

GUM ARABIC—Advanced on spot making a new schedule that ranged from 9¼c to 9½c per pound as to quantity for the amber sorts grade. The move was said to be a reflection of the higher replacement position and did not in any way point to a betterment in the movement into manufacturing channels here.

Exports of gum from the Sudan during January 1934 registered a big increase as compared with January 1933, according to a report from Cairo.

ASAFOETIDA—Quotations continued steady in spite of the fact that imports were decidedly heavy. Approximately 14,000 pounds valued at $2,000 were entered for consumption here during the first quarter of 1934 as compared to 14,600 pounds for the entire year of 1933. Prices on spot ranged from 22c to 23c per pound and there were no indications that the heavy arrivals would cause unsettlement here.

CAMPHOR—Spot quotations on slabs and powder were 1c per pound lower at 52c to 54c as to quantity and seller. It was said that a buyer for 25 case lots would find the market slightly lower than the above quotations. Consuming demand was light.

Shipments of "camphor and manna" from Germany in the first quarter of 1934 totaled 586,800 kilos valued at 975,000 marks, compared with 151,500 kilos, value 429,000 marks, in the corresponding period of 1933. The United States share increased from 5,000 kilos to 147,700 kilos in the comparable periods of 1933 and 1934.

Imports of camphor into the United States increased to $427,718 in the first quarter of 1934, from $203,326 in the corresponding period of 1933. Comparative data follows:

	1933		*1934*	
	Pounds	*Value*	*Pounds*	*Value*
Nat., crude..	460,052	$ 86,260	931,085	$208,429
Nat., ref....	305,093	100,441	509,324	177,791
Synthetic...	65,974	16,625	106,496	41,498

CARNAUBA—Large unsold stocks resulted in a competitive condition early in the month that drove down prices to a point that was said to be actually below the replacement position in the primary market. During late trading, however, a substantial recovery was noted and number 1 gum is now selling at 1c per pound above the price that prevailed before the decline. This range is now from 33c to 33½c per pound. Brazil was a strong market and demand here is good especially for forward delivery.

Carnauba wax imports from Brazil amounted to 4,581,000 pounds valued at $794,300 during the first four months of this year, being more than double the amount imported during the corresponding period of 1933.

SPERMACETI—Very firm on spot with blocks at 19c to 21c and cakes at from 20c to 22c per pound. It was reported, however, that domestic refiners were not maintaining the full schedule of quotations. Against this was sellers of imported goods with values of 19c per pound for blocks and 20c for cakes.

WAX IMPORTS—Recorded marked increases in the first quarter of 1934, as shown in the following table:

	January-March, 1933	
	pounds	*value*
Beeswax, crude	765,035	$100,065
" bleached	7 336	1,330
Carnauba wax	1,473,558	178,294
Vegetable wax	645,857	29,483
Total	2,891,786	309,172

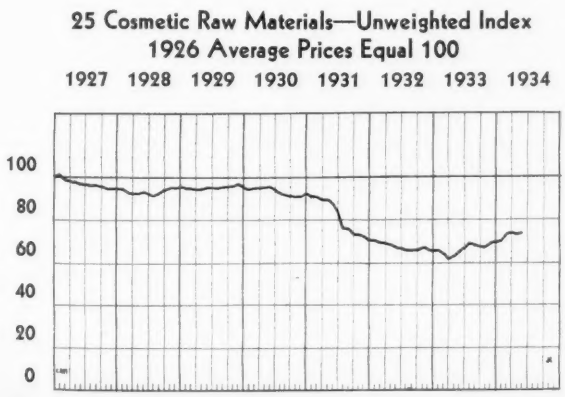
	January-March, 1934	
	pounds	*value*
Beeswax, crude	1,087,276	$182,712
" bleached	56	17
Carnauba wax	3,313 902	544,255
Vegetable wax	617,575	41,935
Total	5,018,809	768,919

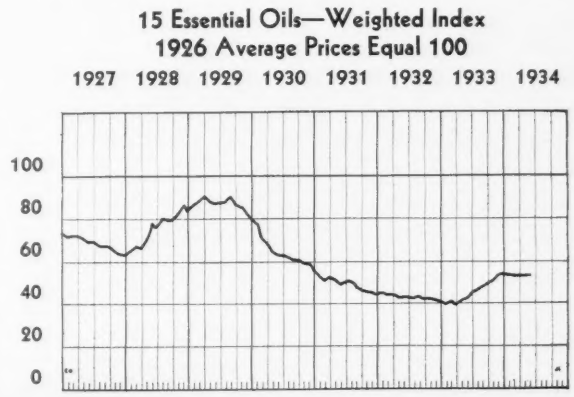
Imports of these products have been holding up better than many commodities, and total imports of waxes in 1933 were 15,369,670 pounds valued at $1,742,155, compared with 12,846,624 pounds valued at $1,433,193 in the year 1932.

Papain

At present almost the only country producing papain on a commercial scale, according to the Bulletin of the Imperial Institute (London), is Ceylon. The tree (Carica Papaya) from which it is obtained grows well in many other parts of the Tropics, and planters in East Africa, South Africa, and other countries are considering producing the material. Small supplies from East Africa have already reached the London market. The product is employed in medicine and in various digestive preparations.

The yield of papain varies considerably according to the locality in which the trees are grown, the variety, and the amount of fruit per tree. In Ceylon, 175 pounds of dried material per acre is regarded as a good yield, but the average yield per acre there is stated to be in the neighborhood of 100 pounds for the first year of tapping on flat lands, and 80 pounds on hilly or rocky lands. In the second year the yield is roughly one-half that of the first year. About 4½ pounds of fresh latex are required to yield 1 pound of dry papain.





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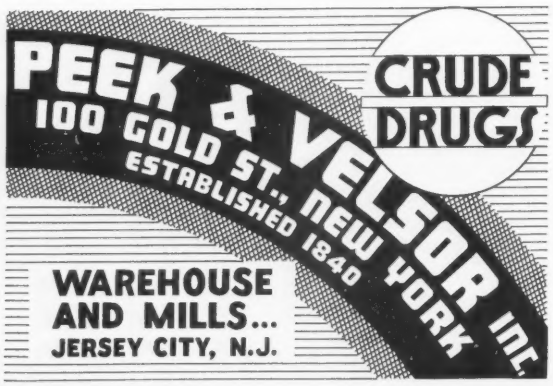

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There are two recognized grades of papain, the sun-dried and the oven-dried product. The oven-dried is of a better color and usually realizes somewhat better prices. The principal factor, however, which determines the value of the product is the degree of enzyme (digestive) activity.

Exports of papain from Ceylon to the United States in 1928 amounted to 111,877 pounds, 1929 117,211, 1930 61,403 pounds, 1931 58,880 pounds and 1932 45,575 pounds.

Fine Chemicals

MENTHOL—The feature of this market continues to be the heavy importations. Recently 500 more cases arrived here and that within a period of one week. This makes the total receipts to May 31 approximately 5,000 cases. This compares with about 1,700 cases for the same period in 1933. A year's consumption at present rate was said to be about 4,000 cases. With new crop peppermint oil ready in July it is believed that if the buying on the part of the essential oil house that has been more or less responsible for maintaining a firm market here should cease, the increment of new supplies would be too much for the present market to absorb.

POTASSIUM IODIDE—Domestic producers reduced prices 10c per pound and are now offering in 100 pound and 25 pound boxes at $1.65 per pound. The decline was caused by the arrival of 10 cases of potassium iodide from Japan. The competitive effect of this material was said to be destructive of values here as the present price is almost on a parity with production costs. The present schedule was for prompt shipment only, no contracts being entered.

PHENOBARBITAL—Quotations were lower at from $5.25 per pound in 25 pound cans to $5.50 in 1 pound cans. This was a direct result of local competition. Contracts are being entered on the basis of a six months period with protection against decline in price.

BELLADONNA—A CENTRAL EUROPEAN BOTANICAL

STRYCHNINE—Alkaloid was advanced 5c per ounce and sulfate 4c per ounce. The following schedule of prices now prevail:

Strychnine Alkaloid N. F. Powd.		
	100 oz. tin incl.	53c per ounce
	25 oz. tin incl.	56c " "
Crystals	100 oz. tin incl.	63c " "
	25 oz. tin incl.	66c " "
Strychnine sulfate U. S. P. Powd.		
	100 oz. tin incl.	44c " "
	25 oz. tin incl.	47c " "
Crystals	100 oz. tin incl.	54c " "
	25 oz. tin incl.	57c " "

The advance was in line with higher production costs and a more satisfactory outlet for the material. Quotations were for spot delivery—no contracts being written.

GLYCERIN—Continued strong but not especially active. The late advance failed to bring out any increase in offerings so that crude material is quite as strong as heretofore reported. Domestic production of C. P. increased in the first quarter of 1934, as compared with the corresponding period of the previous year. The figures for the period January-March 1934 amounted to 19,008,862 pounds as compared to 14,830,293 pounds for the similar period of 1933. Imports of refined glycerin declined during the first quarter of 1934 as compared to the similar period of 1933 being 179,105 pounds and 809,889 pounds respectively.

BISMUTH—Although metal recently declined no reduction was made in the price of the salts. Indications were that lower cost raw material would not immediately be reflected in the schedules for all the bismuth salts. It will be recalled that the makers of salts recently put into effect a general advance on all the bismuth quotations.

Cod liver oil

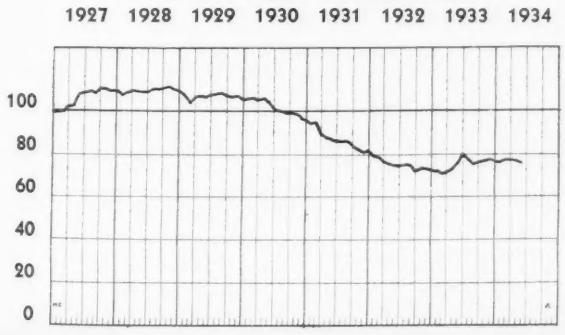
During the past month cod liver oil declined slightly on spot but the late trading period strengthened somewhat at the price range of from $25.50 to $28.00 per barrel as to seller, quantity and brand. Production has been larger than early results of the fishing forecast, but sales for later delivery have accounted for a considerable quantity of the output this year.

Finmarken fishing results up to May 7 are reported as follows: 124,470 tons of cod and 76,972 hectoliters of oil, as compared with 119,005 tons of cod and 69,805 hectoliters of oil at the same date in 1933 and 141,147 tons of cod and 85,939 hectoliters of oil in 1932.

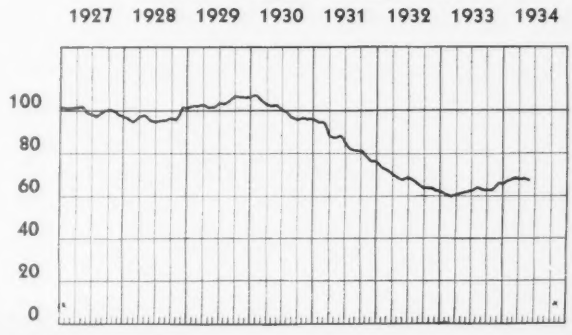
Norway's exports of all grades of cod liver oil during the first quarter of 1934 totaled 1,355,400 gallons or 64,700 gallons

(Continued on page 677)

15 Medicinal Chemicals—Weighted Index
1926 Average Prices Equal 100



15 Botanicals—Weighted Index
1926 Average Prices Equal 100



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AN INTRODUCTION TO DERMATOLOGY
by
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Professor of Diseases of the Skin, University of Kansas School of Medicine
and
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Visiting Dermatologist to the Kansas City General Hospital
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Cinchonine Sulfate	oz.	.34	.36
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Ethyl Acetate	lb.	.09	.10
Anthranilate	lb.	9.25	9.50
Benzoate	lb.	1.25	1.50
Butyrate	lb.	1.80	2.00
Caproate	lb.	3.25	3.50
Chloride	lb.	.22	.24
Cinnamate	lb.	4.00	4.50
Formate	lb.	1.00	1.25
Phenyl Acetate	lb.	3.75	4.00
Salicylate	lb.	1.95	2.00
Valerate	lb.	...	3.75
Eucalyptol	lb.	.65	.70
Eucalyptus Leaves	lb.	.05	.06
Eucalyptus Oil	lb.	.29	.31
Eugenol	lb.	2.00	2.50
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Formaldehyde, USP	lb.	.07	.07¼
Galbanum Gum	lb.	.75	.80
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Gamboge Gum	lb.	.60	.65
Gentian Root	lb.	.10	.11
Geraniol	lb.	1.50	3.00
Geranium Oil, African	lb.	6.50	7.50
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Formate	lb.	12.00	12.50
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Ginger Oil	lb.	3.40	3.75
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Phosphate	lb.	...	.69
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Pyrophosphate, USP	lb.	.74	.80
& Sodium Oxalate	lb.	.27½	.28½
Sulfate	lb.	.04	.04½
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Iso Butyl Benzoate	lb.	3.75	4.00
Iso Eugenol	lb.	4.00	4.50
Iso Safrol	lb.	1.75	1.85
Isopropyl Alcohol	gal.	.80	.85
Jaborandi Leaves	lb.	.11	.12½
Jalap Resin	lb.	...	4.00
Jalap Root	lb.	.14	.16
Japan Wax	lb.	.07	.08
Juniper Berry Oil	lb.	1.50	3.50
Juniper Wood Oil	lb.	.50	.60
Kaolin	lb.	.05	.08
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Heptenone	lb.	3.50	4.00
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Salicylate	lb.	.40	.43
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Mineral Oil, White	gal.	.56	.99
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Morphine Alkaloid	oz.	11.15	11.20
Acetate	oz.	8.80	8.85
Ethyl Hydrochloride	oz.	10.55	10.60
Hydrobromide	oz.	8.75	8.80
Hydrochloride	oz.	8.85	9.10
Sulfate	oz.	8.75	8.80
Mullein Flowers	lb.	1.05	1.10
Mullein Leaves	lb.	.07	.07½
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Musk Ketone	lb.	7.55	7.80
Musk Root	lb.	.06	.07
Musk Tonquin	oz.	18.00	22.00
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Neroli Oil Petale	lb.	90.00	100.00
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Capsicum	lb.	2.25	3.25
Cubeb	lb.	2.30	2.60
Ginger	lb.	2.20	2.70
Orris	lb.	7.50	13.00
Vanilla	lb.	6.00	7.00
Olibanum Gum, siftings	lb.	.07	.07½
Tears, No. 1 extra	lb.	.19	.21
Olive Oil, Edible	gal.	1.45	1.65
Orange Oil, American, cold pressed	lb.	...	1.25
American, dist	lb.	...	.55
Bitter	lb.	1.30	1.45
W. Ind	lb.	1.50	1.60
Italian	lb.	1.40	1.70
Orchic Substance (Testicular)	lb.	...	3.75
Origanum Oil	lb.	.25	.27
Orris, Oil Concrete	oz.	3.50	4.00
Orris Root, Flor	lb.	.11	.12
Verona	lb.	.08	.09
Ovarian Residue	lb.	...	10.00
Ovarian Substance, whole	lb.	...	12.50
Oxgall Powder	lb.	...	1.25
Oxgall Purified	lb.	2.00	2.50
Oxgall USP Extract	lb.	1.80	1.90
Oxyquinoline Sulfate	lb.	3.50	4.75
Ozokerite Wax, Green, hard	lb.	.33	.42
White	lb.	.32	.45
Yellow	lb	.24	.35

Pancreatin	lb.	...	1.90
Papain, Pure, powdered	lb.	4.50	4.75
Para-Aldehyde	lb.	.48	.50
Paracresol Methyl Ether	lb.	3.25	3.50
Paracresyl Acetate	lb.	4.25	4.50
Para-Cymene	gal.	2.25	2.50
Paraffin Wax	lb.	.05½	.09
Parsley Oil	lb.	8.25	8.50
Passion Flower	lb.	.08	.09
Patchouli Leaves	lb.	.15	.16
Patchouli Oil	lb.	3.25	4.00
Pennyroyal Herb	lb.	.08	.09
Leaves	lb.	.12	.13
Pennyroyal Oil	lb.	2.00	2.30
Pepper Black	lb.	...	6.00
Peppermint Oil, Natural	lb.	2.65	3.00
Peppermint Oil, Redis	lb.	2.85	3.05
Pepsin, USP	lb.	2.25	6.50
Peptone	lb.	...	1.25
Petit Grain Oil, S. A	lb.	1.15	1.25
Petrolatum, Lily white	lb.	.08½	.09½
Petrolatum, Snow white	lb.	.09½	.10½
Phenobarbital	lb.	5.25	5.50
Phenolphthalein, USP	lb.	.52	.60
Phenolphthalein, Yellow	lb.	...	.47
Phenylacetaldehyde	lb.	5.00	8.25
Phenylacetic Acid	lb.	2.25	2.50
Phenyl Diacetate	oz.	3.00	3.25
Ethyl Acetate	lb.	5.00	5.50
Ethyl Alcohol	lb.	3.85	4.10
Ethyl Butyrate	lb.	11.00	12.00
Ethyl Formate	lb.	19.00	21.00
Ethyl Propionate	lb.	10.00	12.00
Ethyl Valerate	lb.	14.00	15.00
Methyl Carbinol	lb.	...	10.00
Methyl Carbinol Acetate	lb.	...	10.50
Propyl Alcohol	lb.	5.50	6.00
Propyl Aldehyde	lb.	...	12.00
Phosphoric Acid	lb.	.14	.15
Pilocarpine Hydrochloride	oz.	2.50	2.75
Pilocarpine Nitrate	oz.	2.40	2.65
Pimento Berry Oil	lb.	2.75	3.00
Pimento Leaf Oil	lb.	1.15	1.30
Pine Needle Oil	lb.	.85	.90
Pinus Pimulio Oil	lb.	2.00	2.05
Pinus Sylvestris Oil	lb.	1.40	2.00
Piperadine	lb.	...	8.00
Pituitary Substance, whole		...	40.00
Anterior Lobe		...	39.00
Plantago, Seed, Blonde	lb.	.05¼	.06
Ponceau 3R No. 56	lb.	5.75	6.00
Podophyllin	lb.	3.00	3.25
Poppy Flowers	lb.	.35	.40
Potassium Acetate	lb.	.26	.30
Bicarbonate	lb.	.07½	.08
Bromide	lb.	.35	.36
Citrate	lb.	.38	.42
Guaiacol Sulfonate	lb.	1.65	1.70
Hypophosphite	lb.	.65	.70
Iodide	lb.	...	1.65
Lactophosphate	lb.	...	.90
Permangan	lb.	.18½	.19
Phosphate Dibasic	lb.	...	.49
Salicylate	lb.	...	1.18
Sulfate	lb.	.13	.15
Sulfocyanide	lb.	...	.50
Tartrate	lb.	...	.65
Prickly Ash Bark	lb.	.12	.15
Prickly Ash Berries	lb.	.20	.21
Psyllium Seed, Black	lb.	.10½	.12½
Pyrethrum Flowers	lb.	.28	.30
Quince Seed, Persian	lb.	.85	1.25
Spanish	lb.	.60	.65
Quinidine Alkaloid	oz.	.96	1.02
Sulfate	oz.	...	.67
Quinine Bisulfate	oz.	...	.61
Citrate	oz.	...	.81
Dihydrobromide	oz.	...	.84
Dihydrochloride	oz.	...	.84
Glycerophosphate	oz.	...	1.23
Hypophosphite	oz.	...	1.01
Phosphate	oz.	...	.92
Salicylate	oz.	...	.82
Sulfate	oz.	.51	.61
Rennet	lb.	...	3.75
Resorcinol	lb.	1.57	1.65
Rhatany Root	lb.	.11	.12
Rhodinol	lb.	6.00	8.25
Rhubarb Root HD	lb	.25	.26
Rice Starch	lb.	.09	.10
Rochelle Salt	lb.	.14½	.15
Rosemary Oil	lb.	.38	.48
Rose Oil, Bulg	oz.	7.50	15.00
French	lb.	14.00	17.00
Rue Herb	lb.	.16	.18
Rue Oil	lb.	2.25	2.50
Sabadilla Seed	lb.	.33	.34
Saccharin	lb.	1.70	1.80
Saffron Flowers	lb.	.27	.28
Saffron Valencia	lb.	11.75	12.00
Safrol	lb.	.46	.48
Sage Oil, Dalmatian	lb.	2.40	2.50
Salicylic Acid	lb.	.40	.45
Salol	lb.	.90	.95
Sandalwood Oil	lb.	5.75	6.00
Santonin	lb.	30.00	42.00
Saponin	lb.	1.45	1.50
Sarsaparilla Root, Honduras	lb.	.50	.55
Mexican	lb.	.14	.16
Sassafras Bark	lb.	.13	.15
Sassafras Oil	lb.	.90	1.05

Sassafras Oil, Artificial	b.	.41	.43
Savin Oil	lb.	2.00	2.50
Savory Leaves	lb.	.07½	.08
Saw Palmetto Berries	lb.	.07	.08
Scammony Resin	lb.	1.30	1.35
Scammony Root	lb.	.06	.07
Seidlitz Mixture	lb.	.12¼	.12¾
Senega Root	lb.	.34	.37
Senna Alex	lb.	.20	.25
Senna Half Leaf	lb.	.08	.10
Senna Tinnevelly, Bold	lb.	.11	.13
Silver Nitrate	oz.	.31½	.33½
Nucleinate	oz.	...	.30
Proteinate	oz.	.29	.31
Skatol	lb.	4.50	7.00
Soap Bark, crushed	lb.	.09	.10
Soap Bark, cut	lb.	.08	.09
SOAP			
Castile	lb.	.23	.25
Green	lb.	.07½	.07½
Neutral powd	lb.	.18½	.20½
Sodium Benzoate	lb.	.47	.52
Bromide	lb.	.36	.37
Citrate	lb.	...	.31½
Glycerophosphate	lb.	1.27	1.33
Hypophosphite	lb.	.60	.65
Iodide	lb.	2.75	2.80
Phosphate	lb.	.28	.29
Phosphate Di Sodium	lb.	.07½	.08
Pyrophosphate	lb.	...	.29
Salicylate	lb.	...	.47
Sulfocarbolate	lb.	...	.25
Spartein Sulfate	oz.	1.00	1.05
Spearmint Oil	lb	1.25	1.40
Spermaceti	lb.	.20	.22
Spruce Oil	lb.	.75	.80
Stearic Acid, TP	lb.	.12¼	.13
Stramonium Leaves	lb.	.30	.31
Strontium Bromide	lb.	.52	.53
Strychnine Alkaloid	oz.	...	.63
Glycerophosphate	oz.	...	.71
Hypophosphite	oz.	...	.81
Phosphate	oz.	...	.71
Sulfate	oz.	...	.54
Styrax Genuine, USP	lb.	.38	.43
Styrax Liquid, Artificial	lb.	.26	.35
Succinic Acid	lb.	...	1.35
Sugar of Milk	lb.	.18	.20
Sulfurous Acid	lb.	.05	.06
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Italian	ton	60.00	75.00
Tansy Oil	lb.	1.85	2.00
Tar Oil USP	lb.	.75	1.50
Tartar Emetic	lb	.28	.29
Tartaric Acid	lb.	.26	.26½
Tartrazine No. 94	lb.	2.80	2.90
Terebene	lb.	.65	.70
Terpineol	lb.	.39	.45
Terpin Hydrate	lb.	.50	.51
Terpinyl Acetate	lb.	.85	.90
Theobromine Alkaloid	lb.	1.80	1.85
Thyme Oil, red NF	lb.	.55	.97
Thyme Oil, white NF	lb.	.80	1.05
Thymol	lb.	1.65	1.70
Thymol Iodide	lb.	3.85	3.90
Thyroid, USP			3.75
Tonka Beans, Angostura		3.90	4.00
Para	lb.	.65	.75
Surinam	lb.	2.25	2.35
Tolyl Aldehyde	lb.	1.70	2.65
Tragacanth Gum No. 1	lb.	1.15	1.25
No. 2	lb.	1.00	1.10
Turmeric Root Aleppy	lb.	.06¼	.06¾
Madras	lb.	.06	.06½
Turpentine, Artificial	lb.	.15	.16
Turpentine, USP	lb.	.34	.37
Turpentine Venice True	lb.	.35	.36
Valerian Root	lb.	.17	.20
Vanilla Beans, Bourbon	lb.	2.50	3.50
Mex. Cuts	lb	3.00	3.50
Mex. Whole	lb.	3.50	4.25
Vanillin	lb.	4.25	4.75
Veratrine Alkaloid	oz.	...	2.25
Sulfate	oz.	...	2.25
Vetivert Oil, Bourbon	lb.	8.75	9.00
Indian	lb.	22.00	25.00
Java	lb.	18.00	19.00
Vetivert Root	lb.	.15	.16
Vetiveryl	lb.	19.50	20.00
Acetate	lb.	22.00	23.00
Wahoo Bark of Root	lb.	.38	.40
Wahoo Bark of Tree	lb.	.16	.18
White Pine Bark, Roseed	lb.	.05½	.06
White Poplar Bark	lb.	.06	.07½
Witch Hazel Bark	lb.	.05½	.06¼
Witch Hazel Extract	gal.	.60	.80
Witch Hazel Leaves	lb.	.06	.07
Wild Cherry Bark, Green	lb.	.06	.07
Wild Cherry, Rossed bales	lb.	.09	.10
Wine Oil, heavy	lb.	1.50	1.60
Wintergreen Oil	lb.	4.00	8.00
Wormseed, American	lb.	.06	.07
Wormseed Oil	lb.	1.85	1.95
Wormwood Herb	lb.	...	...
Wormwood Oil	lb.	3.00	3.90
Ylang Ylang Oil, Bourbon	lb.	6.00	7.00
Zinc Carbonate	lb.	.28	.31
Zinc Chloride	lb.	.24	.29
Zinc Iodide	lb.	4.20	4.25
Zinc Oxide	lb.	.13	.14
Zinc Stearate	lb.	.18	.19
Zinc Sulfate	lb.	.08	.09

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Compounders' Corner

(*Continued from page 648*)

Methylcellulose in Cosmetics

Methylcellulose is one of the newer cellulose ethers. Its proposed use in making cosmetics and toilet articles is very interesting. Its use is suggested as a substitute for various slimes, such as gum tragacanth, agar-agar, carraghen moss and the like. Methylcellulose is a whitish-yellowish substance and looks like paper pulp. It is difficultly soluble in water. An additional product, also an ether of cellulose but water-soluble, has also been proposed for cosmetic use. When methylcellulose is treated with boiling hot water and then cooled with agitation, the colloid passes into solution below a temperature of 20° C. The lower the solution is cooled, the clearer and smoother it appears. Small lumps remain when the methylcellulose has not been properly cooled. The solution is then very thick and resembles gum tragacanth slime. When the solution is heated to above 65° C., it coagulates. Methylcellulose is furnished in four different viscosities, namely 5, 25, 100 and 400, according to the Cochius method. Methylcellulose is very resistant to chemical influences and are not subject to decomposition or spoilage due to the growth of molds, as for example is vegetable slimes. There is no need to use preservatives. It is also resistant to acids and can be mixed without fear with boric acid, phosphoric acid, citric acid, acetic acid and tartaric acid in the cold. The colloid is not destroyed. The pH value may lie between 3 and 8 without any injury to the colloid being observed at normal temperature. Weak alkalies increase the viscosity of the methylcellulose solution, which may therefore be mixed with soap without any trouble. Glycerin and polyglycerins can be mixed with the methylcellulose, preferably being added after the viscous solution has been prepared. Diethyleneglycol and ethylpolyglycol can also be used after a little alcohol has been added to the methylcellulose solution. The latter is however not resistant to all salts. Neutral di-basic and mono-basic salts, such as sodium sulfate, trisodium phosphate, sodium molybdate coagulate the solution, while sodium chloride, potassium iodide, potassium chlorate and the like are well borne by the solution. Ammonia and caustic potash also do not affect the solution. Concentrated peroxide, such as hydrogen peroxide decompose the colloid, but it appears that magnesium peroxide can be well resisted by the solution, provided the concentration of the peroxide is not too great. Very striking is the great emulsifying action and protective colloid effect of a one to two per cent solution of methylcellulose for oils, whale oil, fats, waxes, as well as fine dispersed colors, clay, etc. Thus a mixture of 50% of a 7% concentrated solution of methyl cellulose (25 viscosity) with 5% glycerin and 45% chalk gives a stiff, stable paste. The stiffness of the paste will vary according to the viscosity of the methylcellulose used. Methylcellulose being a synthetic product is made of uniform grade, free from the usual impurities found in vegetable slimes. Furthermore, it has the advantage over gum tragacanth and similar colloids in being more easily processed.

Tooth pastes are easily prepared with methylcellulose. The slime is first prepared by pouring boiling hot water over the methylcellulose. A swollen mass, which looks just like a mixture of paper pulp and water, is obtained. The odor is very slight and only reminds one of paper; the taste is neutral. Solutions under one per cent do not keep well, but good results are obtained with solutions of 1.5 to 2% concentration. In making the tooth paste less water is used than indicated by the formula, and the difference, as well as the water lost by evaporation during the process of making the solution, is made up by the addition of a corresponding weight of ice. There is no trouble in obtaining perfect solution working in this manner. Glycerin may be added as the solution is being made or after it has been made and the slime is allowed to stand for 24 hours. The precipitated chalk is well mixed with 0.5 to 1% essential oil, passed through a sieve and then slowly added in small quantities to the slime in a mixing machine. If soap is used, the pulverized product is mixed with chalk. Saponin or sapamins. has been used for this purpose, but it gives good results only when the mouth washes of ordinary strength. When this substance is used for making mouth washes of high concentration without increasing the alcohol content at the same time, it is found that the soap thickens the preparation to such a degree that it cannot be sprayed. The concentrate also dissolves slowly and with difficulty in water. Furthermore, more soap than oil must be used in order to obtain a clear preparation. The soapy taste of the mouth wash containing a high concentration of soap is also not a particularly desirable quality.

When neutralized sulfonated castor oil is used for this purpose, less need be employed as compared with soap; thus two parts of sulfonated castor oil per one part of soap is satisfactory. However, when the preparation contains alcohol, turbidity easily occurs, and the separated substances cannot be removed by filtration without considerable difficulty. It is also claimed that both sulfonated castor oil as well as castor oil soap does not improve the antiseptic properties of the mouth wash.

Sodium laurylsulfonate as well as sodium laurylsulfate are very useful in emulsifying the essential oils in making a low alcohol mouth wash concentrate. It is claimed that the best substance for this purpose, as proven by actual experimentation, is triethanolamine combined with laurylsulfonic acid or the corresponding sulfate. Even when the essential oils are particularly insoluble in water, one part of the triethanolamine compound or even less per part of essential oil gives a good emulsion. Alcohol and glycerin do not disturb the emulsion. In fact they improve the clarity of the product and make possible reduction of the proportion of emulsifier used.

Cod Liver Oil

(*Continued from page 671*)

less than for the corresponding period of last year. The United States is the largest purchaser of Norway's cod liver oil and took 484,461 gallons in the first three months of the current year.

The Lofoten Islands, where most of the Norwegian cod liver oil is produced, form a chain which stretches out into the Atlantic from north-east to south-west. The space between the islands and the mainland is known as the Vestfjord. The breeding ground of the cod is far more restricted than most people realize, and it is usually confined to an area in the Vestfjord of about 40 miles by 10 miles.

It is curious how little is known of the life habits of the cod, as compared with the salmon, for example. The fish taken from the Lofoten grounds are usually about ten years old, but little is known of their activities during the first few years of their lives. The Lofoten fishing is followed by a second season in Finmarken, when considerably younger cod are caught. It is probable, however, that the cod is an extensive wanderer, and is certainly not so faithful to his own breeding ground as the salmon.

In view of the great value of cod liver oil and of its simple nature, it is surprising that it was not extracted on methodical lines until 1864, when an English firm set up the first cod liver oil factory at Langved, one of the numerous islands between Aalesund and the open sea. The actual cod fisheries, nevertheless, are of great antiquity, and as early as 1240 large quantities of cod and herring were exported to Europe. A hundred years later, however, the Norwegian fisheries fell into the hands of the Hanseatic League. This was an immensely powerful and unscrupulous commercial organization which, by methods of terrorism and corruption, completely controlled the commerce of Northern Europe for four centuries.

Following the downfall of the League, the Norwegians suffered from the enterprising depredations of Algerian pirates, and it was not until about 1815 that their fishing industry began to lay the foundations of its modern prosperity.

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Wolf & Co., Jacques 676
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Young Bros., Inc. 622

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MINERAL OIL
Plymouth Crystal "E"

Refined to an exceptional degree of purity, more than meeting U.S.P. requirements in this respect, Plymouth Crystal "E" Oil will make a fine, white cream which will not develop offensive petroleum or acrid odors after the cream is made.

MAGNESIUM STEARATE

Excellent color and free from offensive odors. These qualities are controlled by using the finest grade of Stearic Acid. The absence of odor of our grade Magnesium Stearate is particularly important for cosmetic manufacturers because it holds down the cost of perfume materials and avoids the destruction of the perfume through development of other odors.

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Equally free from offensive odors, of fine quality and light weight.

SHAMPOO BASE

A specialty of ours, intimately combining Soluble Olive and Castor Oils with specially treated soluble White Mineral Oil.

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Especially produced for cosmetic manufacturers, particularly for use in creams. Again we stress, as in our Crystal "E" Oil, the freedom from paraffin or kerosene odors. Melting point kept about same as Beeswax, so that in using it with Beeswax, lumpiness due to variation in melting point of waxes used is avoided.

Beeswax, white, U. S. P.
Stearol
Italian Talc
Kaolin
Lanolin (Anhydrous)
Magnesium Carbonate, U. S. P.
Ozokerite
Paraffin Wax
Petrolatum (Solid)
Rice Starch (Java)
Spermaceti
Zinc Oxide, U. S. P.
Thoreps—The New Absorption Base

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Imports and
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ALSO CERTAIN SPECIAL GRADES

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Soft consistency USP Petrolatums, YELLOW or WHITE

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STOCKS CARRIED IN PRINCIPAL CITIES

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